Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

http://www.archive.org/details/calendar187576mcgiuoft

McGill University

ANNUAL CALENDAR

OF

McGILL COLLEGE

AND

UNIVERSITY

MONTREAL.

FOUNDED BY BEQUEST OF THE HON. JAMES McGILL, IN 1811.
ERECTED INTO A UNIVERSITY BY ROYAL CHARTER
IN 1821; AND RE-ORGANIZED BY AN
AMENDED CHARTER IN 1852.

SESSION OF 1875-6.

MONTREAL:
PRINTED FOR THE UNIVERSITY BY J. C. BECKET, 658 CRAIG ST,

1875.

LE
3
M2
1975/76

694382
7.2.59

BENEFACTORS OF

McGill University, Montreal.

I. ORIGINAL ENDOWMENT, 1811.

THE HONOURABLE JAMES McGILL, by his last will and Testament, under date 8th January, 1811, bequeathed the Estate of Burnside, situated near the City of Montreal, and containing forty-seven acres of land, with the Manor House and Buildings thereon erected, and also the sum of ten thousand pounds in money, unto the "Royal Institution for the advancement of Learning," constituted by Act of Parliament in the Forty-first Year of the Reign of his Majesty, King George the Third, to erect and establish a University or College for the purpose of Education and the advancement of learning in the Province of Lower Canada, with a competent number of Professors and Teachers to render such Establishment effectual and beneficial for the purposes intended, requiring that one of the Colleges to be comprised in the said University, should be named and perpetually be known and distinguished by the appellation of "McGill College."

The value of the above mentioned property was estimated at the date of the bequest at - - - - - - - - - $120,000,

II. WILLIAM MOLSON HALL.

In 1861 the "William Molson Hall," being the west wing of the McGill College buildings, with the Museum Rooms, and the Chemical Laboratory and Class Rooms, was erected through the munificent donation of the founder whose name it bears.

III. ENDOWED CHAIRS.

THE MOLSON CHAIR OF ENGLISH LANGUAGE AND LITERATURE, in 1856, by the Honourable John Molson, Thomas Molson Esq., and William Molson, Esq.—$20,000.

THE PETER REDPATH CHAIR OF NATURAL PHILOSOPHY, in 1871, by Peter Redpath, Esq.—$20,000.

THE LOGAN CHAIR OF GEOLOGY, in 1871, by Sir W. E. Logan, LL.D., F.R.S. and Hart Logan, Esq.—$20,000.

THE JOHN FROTHINGHAM CHAIR OF MENTAL AND MORAL PHILOSOPHY in 1873, by Miss Louisa Frothingham,—$20,000.

IV. EXHIBITIONS AND SCHOLARSHIPS IN ARTS.

THE JANE REDPATH EXHIBITION, $100 annually,—founded in 18[illegible] by Mrs. Redpath of Terrace Bank, Montreal, and endowed with the sum of $[illegible]7.

THE GOVERNOR'S SCHOLARSHIP of $100 to $120 annually—founded by subscription of members of the Board of Governors in 1809.

THE McDONALD SCHOLARSHIPS AND EXHIBITIONS, 10 in number—[illegible]ed in 1871, by William C. McDonald, Esq.—Annual value, $1,250.

THE CHARLES ALEXANDER SCHOLARSHIP for Classics,—founded in 1871 by Charles Alexander, Esq.—Annual value, $120.

THE TAYLOR SCHOLARSHIP—founded in 1871, by T. M. Taylor, Esq.—Annual value $100.

THE SCOTT EXHIBITION,—founded by the Caledonian Society of [illegible]real in commemoration of the Centenary of Sir Walter Scott, and endowed in 1872 with the sum of $1100 subscribed by members of the Society, and [illegible]zens of Montreal. The Exhibition is given annually in the Department of Practical and Applied Science.

V. ENDOWMENTS OF MEDALS.

In 1856 Henry Chapman, Esq., founded a gold medal to be named the "Henry Chapman Gold Medal," to be given annually in the graduating class in Arts. This Medal was endowed by Mr. Chapman in 1874 with the sum of $700.

In 1860 the sum of £200 presented to the College by H. R. H. the Prince of Wales was applied to the foundation of a Gold Medal, to be called the "Prince of Wales Gold Medal," which is given in the graduating class for Honour Studies in Mental and Moral Philosophy.

In 1864 the "Anne Molson Gold Medal," was founded and endowed by Mrs. John Molson of Belmont Hall, Montreal, for an Honour Course in Mathematics and Physical Science.

In the same year the "Shakespeare Gold Medal," for an Honour Course to comprise and include the works of Shakespeare and the Literature of England from his time to the time of Addison, both inclusive, and such other accessary subjects as the Corporation may from time to time appoint,—was founded and endowed by citizens of Montreal, on occasion of the three hundredth anniversary of the birth of Shakespeare.

In the same year the "Logan Gold Medal," for an Honour Course in Geology and Natural Science, was founded and endowed by Sir William Edmund Logan LL.D., F.R.S., F.G.S., &c.

In 1865 the "Elizabeth Torrance Gold Medal," was founded and endowed by John Torrance, Esq., of St. Antoine Hall, Montreal, in memory of the late Mrs. John Torrance, for the best student in the graduating class in law, and more especially for the highest proficiency in Roman Law.

In the same year, the "Holmes Gold Medal," was founded by the Medical Faculty, as a memorial of the late Andrew Holmes, Esq., M.D., LL.D., late Dean of the Faculty of Medicine, to be given to the best student in the graduating class in Medicine, who shall undergo a special examination in all the branches, whether Primary or Final.

In 1874 a Gold and a Silver Medal were given by His Excellency the Earl of Dufferin, Governor General of Canada, for competition in the Faculty of Arts.

VI. SUBSCRIPTIONS TO THE GENERAL ENDOWMENT, 1856.

John Gordon McKenzie, Esq.	$2000	Honourable John Rose	$600
Ira Gould, Esq.	2000	Charles Alexander, Esq.	600
John Frothingham, Esq.	2000	Moses E. David, Esq.	600
John Torrance, Esq.	2000	Wm. Carter, Esq.	600
James B. Greenshields, Esq.	1200	Thomas Paton, Esq.	600
William Bestby Lambe, Esq.	1200	Wm. Workman, Esq.	600
Sir George Simpson, Knight.	1000	Honourable Sir A. T. Galt	600
Henry Thomas, Esq.	1000	Honourable Luther H. Holton	600
John Reynolds, Esq.	1000	Henry Lyman, Esq.	600
James McDougall, Esq.	1000	David Torrance, Esq.	600
James Torrance, Esq.	1000	Edwin Atwater, Esq.	600
Honourable James Ferrier.	1000	Theodore Hart, Esq.	600
John Smith, Esq.	1000	William Forsyth Grant, Esq.	600
Charles Stephens, Esq.	1000	Robert Campbell, Esq.	600
James Mitchell, Esq.	1000	Alfred Savage, Esq.	600
Henry Chapman, Esq.	600	James Logie, Jr., Esq.	600
Honourable Peter McGill	600	William Sutherland, Esq.	600
John James Day, Esq.	600	N. S. Whitney, Esq.	600
Thomas Brown Anderson, Esq.	600	William Dow, Esq.	600
Peter Redpath, Esq.	600	William Watson, Esq.	600
Thomas M. Taylor, Esq.	600	Edward Mack, Esq.	600
Joseph McKay, Esq.	600	Honourable Charles Dewey Day	200
Donald Lorn McDougall, Esq.	600	John R. Dennis, Esq.	200

1871

William Molson, Esq.	$5000	T. W. Ritchie, Esq.	$600
William C. McDonald, Esq.	5000	A. & W. Robertson, Esqs.	600
Thomas Workman, Esq.	5000	Messrs. Sinclair, Jack & Co.	250
John Frothingham, Esq.	5000	John Reddy, Esq. M.D.	100
J. H. R. Molson, Esq.	2000	Wm. Lunn, Esq.	100
Honourable F. W. Torrance.	1000	Kenneth Campbell, Esq.	100
John McLennan, Esq.	1000	R. A. Ramsay, Esq.	100
B. Gibb, Esq.	600	William Rose, Esq.	50
W. Notman, Esq.	600		

VII. ENDOWMENT FOR DEPARTMENT OF PRACTICAL SCIENCE.

1871

Daniel Torrance, Esq.,	$5000
George Moffatt, Esq.	1000
Charles J. Brydges, Esq.	1000
Robert J. Reekie, Esq.	1000
Hon. James Ferrier (per annum for 7 years)	100
Donald Ross, Esq., (per annum for 5 years,	50
Peter Redpath, Esq., do	400
John H. R. Molson, Esq., do	400
George H. Frothingham, Esq., do	400
T. James Claxton, Esq., (per annum).	100
Charles Gibb, B. A., Donation for Apparatus,	50

VIII. SUBSCRIPTIONS FOR SPECIAL OBJECTS.

Subscriptions for the purchase of Philosophical Apparatus, 1867.

William Molson, Esq.,	$500	John Frothingham, Esq.,	$100
John H. R. Molson, Esq.	500	David Torrance, Esq.,	100
Peter Redpath, Esq.,	500		
George Moffatt, Esq.,	250		$2050
Andrew Robertson, Esq.,	100		

Subscriptions for the erection of a fire-proof Building for the Carpenter Collection of Shells, 1868.

Peter Redpath, Esq.,	$500	Wm. Dow, Esq.,	$100
William Molson, Esq.,	500	Thomas Rimmer, Esq.,	100
Harrison Stephens, Esq.,	100	Andrew Robertson, Esq.,	100
Robert J. Reekie, Esq.,	100	Mrs. Redpath,	100
John H. R. Molson, Esq.,	100	Benaiah Gibb, Esq.,	50
Sir William E. Logan, F.R.S.	100	Honourable John Rose,	50
John Molson, Esq.,	100		
Thos. Workman, Esq., M.P.	100		$2,180
Geo. H. Frothingham, Esq.,	100		

Subscriptions for the Erection of the Lodge and Gates.

William Molson, Esq.,	$100	James A. Mathewson, Esq.,	$100
John H. R. Molson, Esq.,	100	Peter Redpath, Esq.,	100
William Workman, Esq.,	100	G. H. Frothingham, Esq.,	100
Joseph Tiffin, Jr., Esq.,	100	G. D. Ferrier, Esq.,	100
Thos. J. Claxton, Esq.,	100	Geo. W. Warner, Esq.,	100
James Linton, Esq.,	100	John Smith, Esq.,	100
William McDougall, Esq.,	100	Charles Alexander, Esq.,	100
Charles J. Brydges, Esq.,	100	J. Evans, Esq.,	100
George Drummond, Esq.,	100	Henry Lyman, Esq.,	100
Thomas Rimmer, Esq.,	100		
William Dow, Esq.,	100		$2,100
John Frothingham, Esq.,	100		

Subscriptions for the internal fittings of the Library and Museum of the Faculty of Medicine 1872.

G. W. Campbell, A.M., M.D.,	$1200	Robert Craik, M.D.,	200
Wm. E. Scott, M.D.,	200	Geo. E. Fenwick, M.D.,	200
Wm. Wright, M.D.,	200	Joseph M. Drake, M.D.,	200
Robert P. Howard, M.D.,	200	George Ross, M.A., M.D.,	50
Duncan C. McCallum, M.D.,	200		

Library and Museum Funds and Subscriptions.

Mrs. G. H. Frothingham, for the arrangement of Dr. Carpenter's Collection of Mazatlan Shells	$233	Wm. Molson, Esq., for Library Fund.	$4000
T. J. Claxton, Esq., £50 sterling for additions to the Museum.	$250	Wm. Molson, Esq., for Museum Fund.	$2000
		John Thorburn, M.A., for the Library.	$90

J. Livesey, Esq., through Dr. Harrington, $50 for the purchase of Mining Models.

Miscellaneous.

Hon. C. Dunkin, M.P., in aid of the chair of Practical Chemistry.	$1,200	T. M. Thompson, Esq., $250 for two Exhibitions in September, 1871, $200 for two exhibitions in 1872.	$450
Principal Dawson, in aid of the same	$1,200	Rev. Colin C. Stewart, for the "Stewart Prize in Hebrew."	$60
P. Redpath, Esq., do do	$266		

XI. ENDOWMENT, HELD IN TRUST BY THE BOARD OF ROYAL INSTITUTION.

The "Hannah Willard Lyman Memorial Fund" contributed by subscription of former pupils of Miss Lyman, and invested as a permanent Endowment, to furnish annually a Scholarship or Prize in a College for Women affiliated to the University; or in Classes for the Higher Education of Women approved by the University. The amount of the fund is at present $1007.

XII. SPECIAL COLLECTIONS OF BOOKS PRESENTED TO THE LIBRARY.

1. The Peter Redpath Collection of Historical Books—presented by Peter Redpath, Esq., of Montreal. 1129 Volumes.
2. The Robson Collection of works in Archaeology and general Literature, Presented by Dr. John Robson of Warrington, England, 3436 Volumes.
3. The Charles Alexander Collection of Classical Works, presented by C. Alexander Esq. of Montreal, 221 Volumes.

ACADEMICAL YEAR, 1875-6.

SEPTEMBER 1875.

1	Wednesday	Session of Normal School commences.
2	Thursday	Meeting of Normal School Committee.
3	Friday	
4	Saturday	
5	SUNDAY	
6	Monday	
7	Tuesday	
8	Wednesday	
9	Thursday	
10	Friday	
11	Saturday	
12	SUNDAY	
13	Monday	
14	Tuesday	Meeting of Faculty of Arts. Meeting of Faculty of Law.
15	Wednesday	Matriculation and Supplemental Examinations in Classics. Exhibition and Scholarship Examinations.
16	Thursday	Mat. and Supp. Ex'ns. in Mathematics. Exhibition and Scholarship Ex'ns.
17	Friday	Mat. and Supp. Ex'ns. in English, Logic, Mental and Moral Philosophy. Exhibition and Scholarship Ex'n.
18	Saturday	
19	SUNDAY	
20	Monday	Mat. and Supp. Ex'mns. in Modern Language, Suppl. Examn. in Natural Science, Exhibition and Scholarship Examination.
21	Tuesday	Meeting of Faculty of Arts. Lectures in Arts commence.
22	Wednesday	
23	Thursday	
24	Friday	
25	Saturday	
26	SUNDAY	
27	Monday	Meeting of Faculty of Arts.
28	Tuesday	
29	Wednesday	
30	Thursday	

OCTOBER 1875.

1	Friday	Session of Law and Medical Faculties commences.
2	Saturday	Matriculation Examination in Medicine.
3	SUNDAY	
4	Monday	
5	Tuesday	
6	Wednesday	Founder's Birth-Day.
7	Thursday	Meeting of Normal School Committee.
8	Friday	
9	Saturday	The William Molson Hall opened 1862.
10	SUNDAY	
11	Monday	Meeting of Faculty of Arts.
12	Tuesday	
13	Wednesday	
14	Thursday	
15	Friday	
16	Saturday	
17	SUNDAY	
18	Monday	
19	Tuesday	Meeting of Faculty of Law.
20	Wednesday	
21	Thursday	
22	Friday	
23	Saturday	
24	SUNDAY	
25	Monday	Meeting of Faculty of Arts.
26	Tuesday	
27	Wednesday	Regular Meeting of Corporation. School Examiners appointed. Reports on Scholarships and Exhibitions. Accounts audited.
28	Thursday	
29	Friday	
30	Saturday	
31	SUNDAY	

NOVEMBER 1875.

1	Monday	
2	Tuesday	
3	Wednesday	Meeting of Normal School Committee.
4	Thursday	
5	Friday	
6	Saturday	
7	SUNDAY	
8	Monday	Meeting of Faculty of Arts.
9	Tuesday	
10	Wednesday	
11	Thursday	Annual University Lecture.
12	Friday	
13	Saturday	
14	SUNDAY	
15	Monday	
16	Tuesday	Meeting of Faculty of Law.
17	Wednesday	
18	Thursday	
19	Friday	
20	Saturday	
21	SUNDAY	
22	Monday	Meeting of Faculty of Arts.
23	Tuesday	
24	Wednesday	
25	Thursday	
26	Friday	
27	Saturday	
28	SUNDAY	
29	Monday	
30	Tuesday	

DECEMBER 1875.

1	Wednesday	Meeting of Normal School Committee.
2	Thursday	
3	Friday	
4	Saturday	
5	SUNDAY	
6	Monday	Meeting of Faculty of Arts.
7	Tuesday	Meeting of Faculty of Law.
8	Wednesday	
9	Thursday	
10	Friday	Lectures in Arts terminate.
11	Saturday	
12	SUNDAY	
13	Monday	Examinations in Natural Philosophy, 3rd and 4th years. In Classics, 1st and 2nd years.
14	Tuesday	
15	Wednesday	Examinations in Classics, 3rd and 4th years. In Mathematics, 1st and 2nd years.
16	Thursday	Examinations in Applied Science.
17	Friday	Examinations in English, Mental and Moral Philosophy and Hebrew.
18	Saturday	Examinations in Applied Science.
19	SUNDAY	
20	Monday	Examinations in Natural Science and Chemistry.
21	Tuesday	Examinations in French and German.
22	Wednesday	Christmas Vacation commences.
23	Thursday	
24	Friday	
25	Saturday	Christmas-Day.
26	SUNDAY	
27	Monday	
28	Tuesday	
29	Wednesday	
30	Thursday	
31	Friday	

JANUARY 1876.

1	Saturday	
2	SUNDAY	
3	Monday	
4	Tuesday	Christmas Vacation ends.
5	Wednesday	Meeting of Faculty of Arts. Lectures in Arts, Law and Medicine re-commence. Meeting of Normal School Committee.
6	Thursday	
7	Friday	
8	Saturday	
9	SUNDAY	
10	Monday	
11	Tuesday	
12	Wednesday	
13	Thursday	
14	Friday	
15	Saturday	
16	SUNDAY	
17	Monday	Meeting of Faculty of Arts.
18	Tuesday	Meeting of Faculty of Law.
19	Wednesday	
20	Thursday	
21	Friday	
22	Saturday	
23	SUNDAY	
24	Monday	
25	Tuesday	
26	Wednesday	Regular Meeting of Corporation, Examiners appointed. Annual Report to Visitor.
27	Thursday	
28	Friday	
29	Saturday	
30	SUNDAY	
31	Monday	Meeting of Faculty of Arts.

FEBRUARY 1876.

1	Tuesday	Theses for Degree of D. C. L. to be sent in to Deans of Faculty of Law.
2	Wednesday	Meeting of Normal School Committee.
3	Thursday	
4	Friday	
5	Saturday	
6	SUNDAY	
7	Monday	
8	Tuesday	
9	Wednesday	
10	Thursday	Meeting of Examiners.
11	Friday	
12	Saturday	
13	SUNDAY	
14	Monday	Meeting of Faculty of Arts.
15	Tuesday	Meeting of Faculty of Law.
16	Wednesday	
17	Thursday	
18	Friday	
19	Saturday	
20	SUNDAY	
21	Monday	
22	Tuesday	
23	Wednesday	
24	Thursday	
25	Friday	Supplemental Examinations.
26	Saturday	
27	SUNDAY	
28	Monday	Meeting of Faculty of Arts.
29	Tuesday	

MARCH 1876.

1	Wednesday	Meeting of Normal School Committee. No lectures.
2	Thursday	Theses for Degree of M. D. and B. C. L to be sent in to Deans of Faculties.
3	Friday	Lectures in Law close.
4	Saturday	
5	SUNDAY	
6	Monday	
7	Tuesday	
8	Wednesday	Examinations in Law.
9	Thursday	Examinations in Law.
10	Friday	Exam. in Botany, Med. Fac.
11	Saturday	
12	SUNDAY	
13	Monday	Meeting of Faculty of Arts. Examinations in Law.
14	Tuesday	Examinations in Law.
15	Wednesday	Lectures in Medicine terminate. Examinations in Law.
16	Thursday	Examinations in Law.
17	Friday	Examinations in Law.
18	Saturday	Primary Examinations for Degree in Medicine.
19	SUNDAY	
20	Monday	
21	Tuesday	Meeting of Faculty of Law. Final Examinations for Degree of M.D.,C.M.
22	Wednesday	
23	Thursday	
24	Friday	
25	Saturday	
26	SUNDAY	
27	Monday	Meeting of Faculty of Arts. Reports of Attendance on Lectures.
28	Tuesday	
29	Wednesday	Lectures in Arts terminate.
30	Thursday	B. A. Honour Examinations.
31	Friday	Meeting of Convocation for conferring Degrees in Law and Medicine.

APRIL 1876.

1	Saturday	
2	SUNDAY	
3	Monday	Ordinary Examinations, 3rd and 4th years in Natural Philosophy. 1st and 2nd years in Classics.
4	Tuesday	
5	Wednesday	B. A. Honour Examinations.
6	Thursday	Ordinary Examinations, 3rd and 4th years in Classics. 1st and 2nd years in Mathematics.
7	Friday	
8	Saturday	Ordinary Examinations in Applied Science. Theses for Degree of M. A. to be sent in to the Dean.
9	SUNDAY	
10	Monday	B. A. and other Honour Examinations, and Ordinary Examinations in Applied Science.
11	Tuesday	Ordinary Examinations in English Literature, Logic and Mental and Moral Philosophy.
12	Wednesday	B. A. and other Honour Examinations.
13	Thursday	Ordinary Exams in French and Hebrew.
14	Friday	Good Friday—Easter Vacation begins.
15	Saturday	
16	SUNDAY	Easter-Day.
17	Monday	
18	Tuesday	Easter Vacation ends.
19	Wednesday	Ordinary Examinations in Natural Science and Chemistry.
20	Thursday	Examinations in Applied Science.
21	Friday	Ordinary Examinations in German and B. A. Honour Examinations.
22	Saturday	Examinations in Applied Science.
23	SUNDAY	
24	Monday	B. A. and other Honour Examinations.
25	Tuesday	Meeting of Examiners.
26	Wednesday	Regular Meeting of Corporation.
27	Thursday	B. A. Honour Examinations, *viva voce*. Meeting of Examiners. Declaration of Results of Examinations.
28	Friday	
29	Saturday	
30	SUNDAY	

MAY 1876.

1	Monday	Meeting of Convocation for Degrees in Arts.
2	Tuesday	
3	Wednesday	Normal School Committee.
4	Thursday	
5	Friday	
6	Saturday	
7	SUNDAY	
8	Monday	
9	Tuesday	
10	Wednesday	
11	Thursday	
12	Friday	
13	Saturday	
14	SUNDAY	
15	Monday	
16	Tuesday	
17	Wednesday	
18	Thursday	
19	Friday	
20	Saturday	
21	SUNDAY	
22	Monday	
23	Tuesday	
24	Wednesday	Queen's Birth-day.
25	Thursday	
26	Friday	
27	Saturday	
28	SUNDAY	
29	Monday	
30	Tuesday	
31	Wednesday	

JUNE 1876.

1	Thursday	Examns in Normal School commence.
2	Friday	
3	Saturday	
4	SUNDAY	
5	Monday	
6	Tuesday	
7	Wednesday	Normal School Committee.
8	Thursday	
9	Friday	
10	Saturday	
11	SUNDAY	
12	Monday	
13	Tuesday	
14	Wednesday	
15	Thursday	
16	Friday	
17	Saturday	
18	SUNDAY	
19	Monday	
20	Tuesday	
21	Wednesday	Regular Meeting of Corporation. Report of Normal School.
22	Thursday	
23	Friday	
24	Saturday	
25	SUNDAY	
26	Monday	
27	Tuesday	
28	Wednesday	
29	Thursday	
30	Friday	Normal School closes for Summer Vacation.

JULY 1876.

1	Saturday	
2	SUNDAY	
3	Monday	
4	Tuesday	
5	Wednesday	
6	Thursday	
7	Friday	
8	Saturday	
9	SUNDAY	
10	Monday	
11	Tuesday	
12	Wednesday	
13	Thursday	
14	Friday	
15	Saturday	
16	SUNDAY	
17	Monday	
18	Tuesday	
19	Wednesday	
20	Thursday	
21	Friday	
22	Saturday	
23	SUNDAY	
24	Monday	
25	Tuesday	
26	Wednesday	
27	Thursday	
28	Friday	
29	Saturday	
30	SUNDAY	
31	Monday	

AUGUST 1876.

1	Tuesday	
2	Wednesday	
3	Thursday	
4	Friday	
5	Saturday	
6	SUNDAY	
7	Monday	
8	Tuesday	
9	Wednesday	
10	Thursday	
11	Friday	
12	Saturday	
13	SUNDAY	
14	Monday	
15	Tuesday	
16	Wednesday	
17	Thursday	
18	Friday	
19	Saturday	
20	SUNDAY	
21	Monday	
22	Tuesday	
23	Wednesday	
24	Thursday	
25	Friday	
26	Saturday	
27	SUNDAY	
28	Monday	
29	Tuesday	
30	Wednesday	
31	Thursday	

McGill University, Montreal.

The Forty-third Session of this University, being the Twenty-third under the amended charter, will commence in the Autumn of 1875.

By Virtue of the Royal Charter, granted in 1821 and amended in 1852, the Governors, Principal and Fellows of McGill College, constitute the Corporation of the University; and, under the statutes framed by the Board of Governors, with approval of the Visitor, have the power of granting Degrees in all the Arts and Faculties, in McGill College, and Colleges affiliated thereto.

The Statutes and Regulations of the University have been framed on the most liberal principles, with the view of affording to all classes of persons the greatest possible facilities for the attainment of mental culture and professional training. In its religious character the University is Protestant, but not denominational; and while all possible attention will be given to the character and conduct of students, no interference with their peculiar religious views will be sanctioned.

I. McGILL COLLEGE.

The Faculty of Arts.—The complete course of study for the Degree of B. A. extends over four Sessions, of eight months each; and includes Classics and Mathematics, Experimental Physics, English Literature, Logic, Mental and Moral Science, Natural Science, and one Modern Language, or Hebrew; all of which subjects are imperative in the first two years of the Course; but in the third and fourth years options are allowed in favour of the Honour Courses in Classics, Mathematics, Mental and Moral Science, Natural Science and English Literature. Certain exemptions are also allowed to Professional Students.

The Department of Applied Science in the Faculty of Arts provides professional instruction in Civil Engineering, Mining Engineering and Assaying, and Practical Chemistry, leading to the Degree of Bachelor of Applied Science.

The Faculty of Medicine.—The complete course of study in Medicine extends over four Sessions, of six months each, and leads to the degree of M. D., C. M.

The Faculty of Law.—The complete course in Law extends over three Sessions, of six months each, and leads to the degrees of B.C.L. and D. C. L.

II. AFFILIATED COLLEGE.

Students of Affiliated Colleges are matriculated in the University, and may pursue their course of study wholly in the Affiliated College, or in part in McGill College, and may come up to the University Examinations on the same terms with the Students of McGill College.

Morrin College, *Quebec.*—Is affiliated in so far as regards degrees in Arts and Law.

[Detailed information may be obtained from Rev. John Cook, D. D., Principal.]

III. AFFILIATED THEOLOGICAL COLLEGES.

The Congregational College of British North America, *Montreal.*

The Presbyterian College of Montreal, in connection with the Canada Presbyterian Church.

Affiliated Theological College have the right of obtaining for their Students the advantage, in whole or in part, of the course of study in Arts, with such facilities in regard to exemptions as may be agreed on.

IV. AFFILIATED SCHOOLS.

The McGill Normal School provides the training requisite for Teachers of Elementary and Model Schools and Academies. Teachers trained in this School are entitled to Provincial Diplomas.

The Model Schools of the McGill Normal School are Elementary Schools, divided into a Boys' Department, Girls' Department and Primary Schools.

GOVERNING BODY OF THE UNIVERSITY.

VISITOR:—

His Excellency The Right Hon The Earl of Dufferin, Viscount and Baron Clandeboye. Governor General of Canada, &c.

GOVERNORS:—

[*Being the Members of the Royal Institution for the Advancement of Learning.*]

The Hon. Charles Dewey Day. LL.D., D.C.L. *President and Chancellor of the University.*

The Hon. Jas. Ferrier, Senator, M.L.C.
Andrew Robertson, M.A. Q.C.
The Hon. Christopher Dunkin, M.A., D.C.L.
The Hon. Sir John Rose, Bart. K.C.M.G.,
Peter Redpath, Esq.
David Torrance Esq.
George Moffatt, M.A.
John H. R. Molson, Esq
The Hon. Frederick W. Torrance M.A., B.C.L.
Charles J. Brydges, Esq.
The Hon. Sir Alexander T. Galt, K.C.M.G.

PRINCIPAL:—

John William Dawson, M.A., LL.D., F.R.S., *Vice-Chancellor.*

FELLOWS:—

Ven. Archdeacon Leach. D.C.L. LL.D., Vice-Principal and Dean of the Faculty of Arts.
Henry Aspinwall Howe, LL.D.
The Hon. J. J. C. Abbott, D.C.L., Q.C., Dean of the Faculty of Law.
Sir William E. Logan, LL.D., F.R.S.
George W. Campbell, M.A., M.D., LL.D., Dean of the Faculty of Medicine
Rev. John Cook, DD., Principal of Morrin College, Quebec.
Alexander Johnson, M.A., LL.D., Professor of Mathematics and Natural Philosophy, McGill University.
Rev. George Cornish, M.A., LL.D., Professor of Classical Literature, McGill University.
Rev. Henry Wilkes, M.A., D.D., LL.D., Principal and Professor of Theology and Church History in the Congregational College of British North America.
Rev. D. H. McVicar, LL.D., Principal and Professor of Theology in the Presbyterian College of Montreal.
R. A. Ramsay, M.A., B.C.L., Representative Fellow in Arts.
John Reddy, M.D., Representative Fellow in Medicine.
William H. Hicks, Esq., Principal of McGill Normal School.
Rev. John Jenkins, D.D., Chairman of the Protestant Board of School Commissioners for the City of Montreal
J. J. McLaren, M.A., B.C.L., Representative Fellow in Law.
Edward Holton, B.C.L., Representative Fellow in Law.
Gonsalve Doutre, D.C.L. Professor of Civil Procedure.
D. C. McCallum, M.D., Professor of Midwifery.
Samuel B. Schmidt, M.D., Representative Fellow in Medicine.
John R. Dougall, M.A., Representative Fellow in Arts.

[*The Governors, Principal and Fellows, constitute, under the Charter, the Corporation of the University.*]

SECRETARY, REGISTRAR AND BURSAR:

[*And Secretary of the Royal Institution.*]

William Craig Baynes, B.A., Residence, East Wing, McGill College. Office, Burnside Hall. Office hours, 10 to 2.
Assistant Secretary, Edward Alfred Baynes, B.C.L.

OFFICERS OF INSTRUCTION.

PROFESSORS.

JOHN WILLIAM DAWSON, M A , LL.D., F.R.S.—Principal; Logan Professor of Geology and Professor of Natural Philosophy.	East Wing McGill College.
VEN. ARCHDEACON LEACH, D.C.L , LL.D.—Vice Principal, Dean of the Faculty of Arts and Molson Professor of English Literature.	14 University St.
HENRY ASPINWALL HOWE, LL.D.—Emeritus Professor of Mathematics and Natural Philosophy.	405 Sherbrooke Street E.
HON. J. J. C. ABBOTT, D C.L.—Dean of the Faculty of Law and Professor of Commercial Law.	916 Sherbrooke Street.
GEORGE W. CAMPBELL, M.A , M D., LL.D.—Dean of the Faculty of Medicine and Emeritus Professor in the Faculty of Medicine.	707 Sherbrooke Street
WILLIAM E. SCOTT, M.D.—Professor of Anatomy.	43 Beaver Hall Terrace.
WILLIAM WRIGHT, M.D.—Professor of Materia Medica and Pharmacy.	—21 Mance St.
ROBERT P. HOWARD, M.D.—Professor of the Theory and Practice of Medicine.	47 Union Avenue.
REV. A. DESOLA, LL.D.—Professor of Hebrew and Oriental Literature.	73 McGill Col. Av
HON. WILLIAM BADGELY, D.C.L.—Professor of Public and Criminal Law.	64 McGill College Avenue
R. G. LAFLAMME, D.C.L.—Professor of the Law of Real Estate.	294 Lagauchetiere Street.
CHARLES F A MARKGRAF, M.A.—Professor of German Language and Literature	45 Union Avenue.
D. C. MCCALLUM, M.D.—Professor of Midwifery and Diseases of Women and Children.	
ALEXANDER JOHNSON, M A., LL.D—Professor of Mathematics, and Redpath Professor of Natural Philosophy.	4 Place St Sophie McGill Col Av
REV GEORGE CORNISH, M.A . LL D.—Professor of Classical Literature	—149 Metcalf Street.
PIERRE J. DAREY, M.A., B C.L.—Professor of French Language and Literature.	39 McGill College Avenue.
ROBERT CRAIK, M.D.—Professor of Chemistry.	—2 Phillips Sq
EDWARD CARTER, Q. C. B.C.L. – Associate Professor of Criminal Law.	—31 Cadieux St.
G E. FENWICK, M.D.—Professor of Surgery.	24 Beaver Hall Terrace.
JOSEPH M DRAKE, M.D.—Emeritus Professor in the Faculty of Medicine.	19 Beaver Hall Terrace.
N. W. TRENHOLME, M.A., B.C.L.—Professor of Roman Law.	32 Teaver Hall Berrace
J. S C. WURTELE, B.C.L.—Associate Professor of Commercial Law.	416 St. Antoine St.
WILLIAM H. KERR. D C.L.—Professor of International Law.	— 387 Sherbrooke.
GONZALVE DOUTRE, D.C.L.—Professor of Civil Procedure.	37 Mackay Street.
GEORGE F. ARMSTRONG, M.A , C.E , F.G.S.—Professor of Civil Engineering and Applied Mechanics.	
GILBERT P. GIRDWOOD, M.D.—Professor of Practical Chemistry.	28 Beaver Hall Terrace.
REV. J. CLARK MURRAY, LL.D.—Professor of Logic, and John Frothingham Professor of Mental and Moral Philosophy.	78 Victoria Street.
H. F. RAINVILLE, L.L.B., (Laval) Associate Professor of Real Estate Law.	—36 St. Denis St.
GEORGE ROSS, M.A., M.D.—Professor of Clinical Medicine.	—48 Union Avenue.
BERNARD J. HARRINGTON, B.A., Ph. D.—Professor of Assaying and Mining, and Lecturer on Chemistry.	23 Beaver Hall Terrace
THOMAS G. RODDICK, M.D.—Professor of Clinical Surgery	557 Dorchester St.
WILLIAM OSLER, M.D.—Professor of Institutes of Medicine.	—20 Radegonde St
ROBERT T. GODFREY, M.D.—Professor of Hygeine and Public Health.	—960 St. Catherine.
WILLIAM GARDNER, M.D.—Professor of Medical Jurisprudence.	—525 St. Joseph St.

LECTURERS:—

JOHN S. ARCHIBALD, B.A., B.C.L.—Lecturer in Criminal Law.	2 Barron Block. 162 St. James St.
C. H. MCLEOD, Bachelor of Applied Science, Superintendent of Meteorological Observatory.	—College Building.
CHRISTOPHER A. GEOFFRION, B.C.L., Lecturer in Roman Law.	—184 St. Denis St.
EDMOND LAREAU, B.C.L., Lecturer in Legal History.	—293 Notre Dame.
FRANCIS J. SHEPHERD, M. D., Demonstrator of Anatomy.	

JOHN ANDREW, Instructor in Elocution.	—24 Courville St.
FREDERICK S. BARNJUM, Instructor in Gymnastics.	—7 Torrance Ter.

Faculty of Arts.

The Principal (ex-officio).

Professors :—Leach.	Professors :—Cornish.
De Sola.	Darey.
Dawson.	Armstrong.
Markgraf.	Murray.
Johnson.	Harrington.

Dean of the Faculty:—Ven. Archdeacon Leach, D.C.L., LL.D.

Librarian:—Professor Markgraf.

[Contents.—*Course of Study*, §I. ; *Matriculation*, &c., §II.; *Exhibitions*, &c., §III.; *Examinations*, &c., §IV.; *Exemptions*, &c., §V.; *Medals*, &c., §VI.; *Attendance*, &c., §VII.; *Library*, &c., §VIII.; *Fees*, &c., §IX.; *Courses of Lectures*, §X.]

The next Session of this Faculty will commence on September 15th, 1875, and will extend to April 30th, 1876.

---

§I. COURSE OF STUDY.

1. Undergraduates are arranged according to their standing, as Students of the First, Second, Third and Fourth Years ; and are required to attend all the Courses of Lectures appointed for their several years, under the Regulations as to attendance and conduct stated in §VII. The only exceptions are those in favour of Honour and Professional Students, stated in §V.

ORDINARY COURSE FOR THE DEGREE OF B. A.

First Year.—Classics ; French or German ; English Language and Literature ; Pure Mathematics ; History ; Elementary Chemistry.

Second Year.—Classics ; French or German ; Logic ; Pure Mathematics ; Botany.

Third Year.—Classics ; Rhetoric ; Mental and Moral Philosophy ; Mixed Mathematics; Experimental Physics; Zoology.

Fourth Year.—Classics ; English Literature ; Mental and Moral Philosophy ; Mixed Mathematics ; Experimental Physics ; Mineralogy and Geology.

Undergraduates are required to study either French or German for two years, [viz., in the First and Second Years] taking the same language in each year. Any Student failing to pass the Examination at the end of the Second Year, will be required to pass a Supplemental Examination, or to take an additional Session in the Language in which he has failed. In addition to the obligatory, there are other Lectures, attendance on which is optional.

The Lectures in Modern Languages will be so arranged that Students competent and desirous to take in the same years the Lectures in French and in German, may do so.

Students who intend to join any Theological School, on giving written notice to that effect at the beginning of the First Year, may take Hebrew instead of French or German.

The Faculty may permit any Student to take Spanish instead of French or German.

2. At the examination for the Degree of B. A., Honours are given in the following subjects, for which special Honour Courses are provided :—[For details see under §X.]

1. *Classical Languages and Literature.*
2. *Mathematics and Physics.*
3. *Logic and Mental and Moral Philosophy.*
4. *English Language, Literature and History.*
5. *Geology and other Natural Sciences.*

Students taking B. A. Honours in any of the above Courses, may omit two of the ordinary subjects in the Degree Examination, under the conditions stated in §IV., 4.

Honours are given in the above subjects in the Third Year also, and in Mathematics in the First and Second Years as well.

§ II. MATRICULATION AND ADMISSION.

1. Candidates for Matriculation as Undergraduates are required to present themselves to the Dean of the Faculty, on the 15th of September, for examination; they may, however, enter after the commencement of the Session, if, on examination, found qualified to join the classes.

The subjects of examination for entrance into the First Year, are Classics, Mathematics, and English.

In Classics.—Latin Grammar, Greek Grammar, and one easy Latin and one easy Greek Author. The authors recommended are Cæsar; Sallust; Virgil (Æneid, B. I.); Xenophon (Anabasis, B. I.); Homer (Iliad, B. I.)

In Mathematics.—Arithmetic; Algebra, to Simple Equations, inclusive; Euclid's Elements, Books, I., II., III.

In English.—Writing from Dictation,

2. Candidates not matriculated in the University may be admitted to the standing of students of the Second Year, provided that they pass the Sessional Examinations of the First Year, or an examination in the following subjects at the beginning of the Second Year :—

In Classics.—*Greek.*—Homer, Book VI.; Xenophon, Anabasis, Book I.; Grammar, and Prose Composition.

Latin.—Virgil, Æneid, Book VI.; Cicero, Orations against Catiline Grammar and Prose Composition.

In Mathematics.—

Euclid.—Books I., II., III., IV., VI., with defs. of Book V. (omitting propositions 27, 28, 29, of Book VI.).

Algebra.—To end of Quadratic equations (Colenso's Alg.).

Trigonometry.—Galbraith and Haughton's Trigonometry, Chaps. 1, 2, 3, 4, 6, to beginning of numerical solution of plane triangles.

Arithmetic.—Ordinary rules.—Proportion, Interest, Discount, &c., Vulgar and Decimal Fractions, Square Root.

In English Literature.—English Grammar and Composition.

In French or German.—Grammar and easy Translation.

[Candidates who are unable to pass the entrance Examination of the Second Year in Modern Languages, may be allowed to enter, but will be required to take additional lectures in one Modern Language in the Second Year, or to take the subject in both the Second and Third Years.]

Students of other Universities may be admitted, on the production of Certificates, to a like standing in this University, after examination by the Faculty.

PARTIAL STUDENTS.—Candidates for Matriculation as Partial students, taking three or more Courses of Lectures, or as students in any Special Course, will be examined in the subjects necessary thereto, as may from time to time be determined by the Faculty.

OCCASIONAL STUDENTS.—Persons desirous of taking one or two Courses of Lectures as Occasional students, may apply to the Dean for entry in his Register, and may procure from the Secretary tickets for the Lectures they desire to attend.

Every student is expected to present, on his entrance, a written intimation from his parent or guardian, of the name of the minister of religion, under whose care and instruction it is desired that the student shall be placed, who will thereupon be invited to place himself in communication with the Faculty on the subject. Failing such intimation from the parent or guardian, the Faculty will endeavour to establish such relations.

---

§ III. SCHOLARSHIPS AND EXHIBITIONS.

1. A Scholarship is tenable for *two* years. An Exhibition for *one* year.

2. Scholarships are open for competition to Students who have passed the University Intermediate Examination, provided that not

more than three Sessions have elapsed since their Matriculation; and also to candidates who have obtained what the Faculty may deem equivalent standing in some other University.

3. Scholarships are divided into two classes:—[1] *Science* Scholarships; [2] *Classical and Modern Language* Scholarships. The subjects of Examination for each are as follows:—

Science Scholarships.—Differential and Integral Calculus; Analytic Geometry; Plane and Spherical Trigonometry; Higher Algebra and Theory of Equations; Pure Mathematics, (as in Ordinary Course); Botany; Chemistry; Logic.

Classical and Modern Language Scholarships.—Greek; Latin; English Composition; English Language and Literature; French.

4. Exhibitions are assigned to the First and Second Years.

First Year Exhibitions are open for competition to candidates for entrance into the First Year.

Second Year Exhibitions are open for Competition to students who have passed the First Year Sessional Examination, provided that not more than two Sessions have elapsed since their Matriculation; and also to candidates for entrance into the Second Year.

The subjects of Examination are as follows:—

First Year Exhibitions.—Classics, Mathematics, English.

Second Year Exhibitions.—Classics, Mathematics, English Language, Chemistry, French.

5. The First and Second Year Exhibition Examinations will, for Candidates who have not previously entered the University, be regarded as Matriculation Examinations.

6. No student can hold more than one Exhibition or Scholarship at the same time; but four of the First Year Exhibitioners will be granted exemption from the Sessional fees throughout their College Course, under Presentation Scholarships from the Governor General. (See below.)

7. Exhibitions and Scholarships will not necessarily be awarded to the best answerers at the Examinations. Absolute merit will be required.

8. If in any one College Year there be not a sufficient number of Candidates showing absolute merit, any one or more of the Exhibitions or Scholarships offered for competition may be transferred to more deserving Candidates in another Year.

9. A successful Candidate must, in order to retain his Scholarship or Exhibition, proceed regularly with his College Course to the satisfaction of the Faculty.

10. The annual income of the Scholarships or Exhibitions will be paid in four instalments, viz. :—in October, December, February and April.

11. The Examinations will be held at the beginning of every Session.

EXHIBITIONS AND SCHOLARSHIPS TO BE OFFERED IN 1875

There are at present fourteen Scholarships and Exhibitions.

THE JANE REDPATH EXHIBITION, founded by Mrs. Redpath, of Terrace Bank, Montreal :—value, $100 yearly.

THE MCDONALD SCHOLARSHIPS AND EXHIBITIONS, ten in number, established by W. C. McDonald, Esq., Montreal :—value, $125 each, yearly.

THE GOVERNORS' SCHOLARSHIP, established by the Board of Governors:—value $120 yearly.

THE CHARLES ALEXANDER SCHOLARSHIP, founded by Charles Alexander, Esq., Montreal, for the encouragement of the study of Classics and other subjects :—Value, $120 yearly.

THE TAYLOR SCHOLARSHIP OR EXHIBITION, established by T. M. Taylor, Esq., Montreal, value, $120 yearly.

The following will be offered at the Examinations commencing September 15th, 1875, under the regulations stated.

First Year.

FOUR EXHIBITIONS.—One of $125, two of $100. The examinations will be in the following Subjects :—

Greek.—Homer, Iliad, bk. I. ; Xenophon, Anabasis, bk. I. ; Lucian, Charon.

Latin.—Cicero, Pro Lege Manilia ; Livy, bk. V., chaps. I.—XXV. ; Horace, Odes, bk. I.

Text Books.—Hadley's Elements of Greek Grammar.—Arnold's Greek Prose Composition, Exercises 1 to 25. Dr. Wm. Smith's Smaller Latin Grammar, and Principia Latina, Part IV.

Mathematics.—Euclid, bk. I., II., III., IV.; Algebra to end of Harmonical Progression (Colenso). Arithmetic.

English.—English Grammar and Composition.—(Bain's Grammar, as far as Derivation.) Special exercises in Grammar and Composition.

Additional Exhibitions may be given in the First Year, should there not be candidates in the Second and Third Years.

Second Year.

FOUR EXHIBITIONS.—Three of $125 each, and one of $100. The Examinations will be in the following subjects :—

Greek.—Homer, Iliad, bk. VI., and Odyssey, bk. IX. ; Xenophon, Hellenics, bk. I. ; Arrian, bk. III.

Latin.—Virgil, Æneid, bk. VI.; Livy, bk. V., chaps. XXVI.—LV.; Horace, Odes, bk. III.; Cicero, Select Letters (Pritchard & Bernard, Clarendon Press Series).

Text Books.—Dr. William Smith's History of Greece. Liddell's History of Rome. Hadley's Greek Grammar. Smith's Student's Latin Grammar. Arnold's Greek Prose Composition. Smith's Principia Latina, Parts IV. and V.

Mathematics.—The Mathematics (Ordinary and Honour) of the First Year.

English Literature.—Bain's Grammar; Latham's Hand-Book, Prosody;—Special exercises in Grammar and Composition.

Chemistry.—The metallic Elements as in Wilson's Elementary Chemistry.

French.—Moliere, l'Avare, les Femmes savantes, le Misanthrope. De Fivas' Grammaire des Grammaires (up to Syntax). Easy translation from English into French.

Third Year.

FOUR SCHOLARSHIPS.—Each of $125 yearly.

Two of these will be given on Examinations in Science, as follows:—one in Mathematics and one in Natural Science:—

1. *Mathematics.*—Differential Calculus (Hall), Chaps. 1 to 8 inclusive, Chaps. 12 and 14. Integral Calculus (Hall, chaps. 1 to 6 inclusive). Analytic Geometry (Salmon's Conic Sections). Hind's Plane and Spherical Trigonometry. Salmon's Modern Higher Algebra, (first six chapters). Todhunter's Theory of Equations. All the pure Mathematics of Ordinary Course with remainder of Drew's Conic Sections and of Colenso's Algebra [Part I.]. With *Logic* as in Whately's Logic, Books II. and III.

2. *Natural Science.*—*Botany*, as in Gray's Structural and Systematic Botany. *Canadian Botany*, including a practical acquaintance with all the orders of Phænogams and Acrogens. *Chemistry*, as in Wilson's Elements. *Logic*, as in Whately's Logic, Books II. and III.

Two will be given on an Examination in Classics and Modern Languages, as follows:—

Classics.—*Greek.*—Euripides, Medea; Demosthenes, the Olynthiacs; Xenophon, Hellenics, bk. I.; Herodotus, bk. VIII.; Thucydides, bk. I.

Latin.—Horace, Satires, bk. I., and Epistles, bk. I.; Virgil, Georgics, bk. I.; Terence, Adelphi; Tacitus, Annals, bk. I.; Cicero, Select Letters. [Vol. I. Teubner Series.]
Greek and Latin Prose Composition.

History.—*Text Books.*—Rawlinson's Manual of Ancient History; Smith's Greece; Liddell's Rome.

English Language and Literature.—Spalding's English Literature; Bacon's Essays; Klipstein's Anglo-Saxon Grammar; Trench's Study of Words; Trench's English, Past and Present.

English Composition.—(High marks will be given for this subject, in order to encourage the practice of it, after the models of the best writers.

French.—Racine, Britannicus, Andromaque, Iphigenie. De Fivas' Grammaire des Grammaires. Translation from English into French.

EXEMPTIONS FROM FEES UNDER PRESENTATION SCHOLARSHIPS, &c.

A number of these are in the gift of Benefactors, and entitle the students holding them to Exemption from the Sessional Fees in the Faculty of Arts. Sixteen have been placed by the Governors at the disposal of His Excellency the Governor General. Candidates must pass the usual Matriculation Examination

[By command of His Excellency four of these Exemptions will be offered for competition in the First Year Exhibition Examinations of the ensuing session.]

Eight Exemptions from fees may be granted by the Board of Governors, from time to time, to the most successful students who may present themselves as candidates. By order of the Board one of these is given annually to the *Dux* of the High School, and of any other Academy or High School, sending up in one year three or more candidates competent to pass creditably the Matriculation Examination.

In the event of any Academy or High School in the Province of Quebec offering for competition among pupils an Annual Bursary in the Faculty of Arts, of not less than $80, the Governors will add the amount of the fees of tuition thereto.

An Exemption from fees may be given annually to any teacher holding the Model School or Academy Diploma of the McGill Normal School, recommended by the Principal and Professors of the School, and passing creditably the Matriculation Examination in Arts.

---

§ IV. EXAMINATIONS.

COLLEGE EXAMINATIONS.

1. There are two Examinations in each year; one at Christmas, and the other at the end of the Session. In both of these, students will be arranged according to their answering as 1st Class, 2nd Class, and 3rd Class.

In the Fourth Year only, the University Examination for B. A. takes the place of the Sessional Examination.

2. Students who fail in any subject in the Christmas Examinations, are required to pass a Supplemental Examination in that subject before admission to the Sessional Examinations.

3. Students who fail in one subject in the Sessional Examinations are required to pass a Supplemental Examination in that subject. Should they fail in this, they will be required in the following Session to attend the Lectures and pass the Examination in the subject in which they have failed, in addition to those of the Ordinary Course, or to pass the Examination alone without attending Lectures, at the discretion of the Faculty.

4. Failure in two or more subjects at the Sessional Examinations involves the loss of the Session. The Faculty may permit the Student to recover his standing by passsing a Supplemental Examination at the beginning of the ensuing Session. For the purposes of this Regulation, Classics and Mathematics are each regarded as two subjects.

5. The time for the Supplemental Examination will be fixed by the Faculty; and such Examination will not be granted at any other time except by special permission of the Faculty, and on payment of a fee of $5.

UNIVERSITY EXAMINATIONS.

I. FOR THE DEGREE OF B. A.

There are three University Examinations:—The *Matriculation*, at entrance; the *Intermediate*, at the end of the Second Year; and the *Final*, at the end of the Fourth Year.

1. The subjects of the Matriculation Examination are stated in Section II.

2. In the Intermediate Examination, the subjects are Classics and Pure Mathematics, Logic, and the English Language, with one other Modern language, or Botany. Theological Students are allowed to take Hebrew instead of a Modern language. The subjects for the Examination of 1875 are as follows:—

Classics.—Greek.—Isocrates.—The Panegyricus.

Latin.—Tacitus.— { Germania (capp. i.—xxvii.) / Agricola.

Latin Prose Composition.

Mathematics.—Arithmetic.

Euclid, Books I., II., III., IV., VI., and defs. of Book V.

Algebra to Quadratic Equations, inclusive.

Trigonometry, including use of Logarithms.

Logic.—Whately's Logic, Books II. and III.

English.—Spalding's History of English Literature.

An English Essay.

With one of the following.

1. *Botany and Vegetable Physiology.*—Structural and Systematic Botany, as in Gray's Text-book, omitting the Descriptions of the Orders.

2. *French.*—Moliere, Les Femmes Savantes Racine, Britannicus, Esther; History of the French Literature of 17th and 18th centuries; Translation into French.

3. *German.*—Schmidt's German Guide. Adler's Reader. Translation into German.

4. *Hebrew.*—Grammar to the end of the Irregular Verbs. Translation from the Book of Genesis. Exercises,—Hebrew into English, and English into Hebrew.

3. For the Final Examination six subjects are appointed, namely:—[1] Classics, [2] Mixed Mathematics, [3] Mental and Moral Philosophy, [4] Natural Science, [5] Experimental Physics, [6] One Modern Language and Literature (or Hebrew), with History. Every candidate must pass in four of these, namely:—Classics and Mixed Mathematics; which are obligatory: and any two of the remaining subjects, at his option. The subjects for 1875 are as follows:—

1. *Classics.*—Greek,—Plato.—Republic, Book I.
Aeschylus.—Seven against Thebes.

Latin.—Tacitus.—The Histories, Book I.
Juvenal.—Satires. VIII. and X.

Latin Prose Composition.

General Paper in Grammar and History.

2. *Mathematics.*—Mechanics.
Hydrostatics
Optics
Astronomy
} As treated in Galbraith and Haughton's Manuals.

[Except in the case of Exemptions to Professional Students as stated in §V.]

3. *Mental and Moral Philosophy.*—Murray's Outline of Hamilton's Philosophy, Stewart's Outline of Moral Philosophy, Pt. II.

4. *Natural Science.*—Geology and Mineralogy, as in Dana's Geology and Manual of Mineralogy.—The Zoology, Botany and Chemistry necessary to the study of the books above named; or as in Dawson's Hand-book of Zoology; Gray's Structural and Systematic Botany, and Wilson's Inorganic Chemistry.

5. *Experimental Physics.—Light.*—Theories.—Reflection.—Refraction.—Dispersion, Interference and Diffraction.—Double Refraction.—Polarisation. *Heat.*—Dilatation of Solids and Gases.—Specific and Latent Heat.—Radiation and Conduction of Heat.—Mechanical Theory of Heat.

6. *History and English Literature.*—Smith's Student's Gibbon.—Smith's Student's Hume.—Marsh's Hand-book of the English Language and Collier's History of English Literature.

Or instead of History and English, candidates may take one of the following:—

(a) *History and French.*—History as above. The course of French for the Fourth Year.—Bossuet, Discours sur l'Histoire Universelle; Boileau, Art poetique; Translation into French, and French Composition.

(b) *History and German.* History as above. Schiller, Geschichte des 30 jahrigen Krieges; Goethe, Iphigenie auf Tauris; General paper on Grammar; Translation into German, and German Prose Composition.

(c) *History and Hebrew.* (Theological Students only.) History as above. Hebrew Grammar; Translation from first four chapters of Isaiah; any three of the Psalms; the Chaldaic portions of the Scriptures; Targum of Onkelos on Genesis, Chap. I.; Modern Hebrew Poetry, Halevi or Gabirol.

Exemptions for Candidates for Honours in the Third Year.

Candidates for Honours who, at the Sessional Examination of the Second Year, have passed in the First Class in the subjects in which they propose to take Honours, and not below Second Class in the others, may on application to the Faculty be allowed the following exemptions:—

They may in the Lectures and Examinations of the Third Year omit any one of the following subjects not immediately connected with that in which they study for Honours:—(1) Greek, (2) Latin, (3) Optics and Astronomy, (4) Rhetoric, (5) Mental and Moral Philosophy, (6) Experimental Physics, (7) Zoology.

The particular exemption desired must be stated to the Faculty in the application of the candidate, and no change can be made subsequently.

The candidate must pursue the Honour course selected to the satisfaction of the Professor, and must pass the Examination therein.

The above exemptions shall be granted only with reference to Honour subjects in which regular courses of Lectures are delivered in the Third Year.

Exemptions for Candidates for B. A. Honours.

4. Candidates for B. A. Honours, who at the Third Year Sessional Examinations have been placed in the 1st or 2nd Class in any two of the six subjects appointed for the Final Examination, are entitled to the following privileges:—

[1] They may claim to have the Third Year Examination in these two subjects regarded as a B. A. Examination in the same. [This amounts to exemption at the ordinary B. A. Examination from two of the subjects required above.]

[2] They are required to attend the Ordinary Lectures of the Fourth Year in two subjects only. These must be the subjects in which they are to pass the Ordinary B. A. Examination, if Lectures are delivered in them; if not, the choice is left to the Candidate.

No Student shall be entitled to the above privileges unless his attendance on Lectures in the Fourth Year, and progress in the subject in which he is a Candidate for Honours, shall be satisfactory to the Professor: nor unless he shall have obtained a certificate of creditable answering in the Honour Examinations.

2 FOR THE DEGREE OF M. A.

Bachelors of Arts, of at least three years 'standing, are entitled to the degree of Master of Arts after such examination and exercises as may be prescribed by the Corporation. The Regulation at present is, that the Candidate shall prepare a Thesis on some literary, scientific or professional subject, approved by the Faculty. Such Thesis shall be reported on by the Faculty to the Corporation before the granting of the Degree.

---

§V. SPECIAL PROVISIONS FOR PROFESSIONAL STUDENTS.

1. LAW AND MEDICAL STUDENTS.

1. Students of the Third and Fourth Years, matriculated in the Faculties of Law or Medicine of this University, are entitled to the following exemptions :—

In the Third year they may omit the Lectures and Examinations in Astronomy and Optics, and in any one of the following subjects :—Zoology, Experimental Physics or Rhetoric.

In the Lectures of the Fourth year they may omit Greek ; and also Geology or Experimental Physics. At the Christmas Examinations of the Fourth Year, they may omit Astronomy and Optics.

In the Ordinary B. A. Examinations, they may, in Classics, pass in Latin alone ; and in Mixed Mathematics, in Mechanics and Hydrostatics alone.

2. To be allowed these privileges in either year, they must give notice at the commencement of the Session to the Dean of the Faculty of their intention to claim exemptions as Professional Students, and must produce at the end of the Session Certificates of attendance on a full course of Professional Lectures during the year for which the exemptions are claimed.

2. STUDENTS OF AFFILIATED THEOLOGICAL COLLEGES.

1. Such Students, whether entered as Matriculated or Occasional, are subject to the regulations of the Faculty of Arts, in the same manner as other students.

2. The Faculty will make formal reports to the Governing body of the Theological College, to which any such Students may belong, as to :—[1] their conduct and attendance on the classes of the Faculty ; and [2] their standing in the several examinations ; such reports to be

furnished after the Christmas and Sessional Examinations, severally, if called for.

3. Matriculated Students are allowed no exemptions in the course for the degree of B. A., till they have passed the Intermediate Examination; but they may take Hebrew in the First and Second Years, instead of Modern languages.

4. In the Third and Fourth Years they are allowed exemptions from the following subjects:—

In the Third Year, they may omit Astronomy and Optics, and Rhetoric, with Experimental Physics or Zoology.

In the Fourth Year, they may omit English Literature with Experimental Physics or Geology.

5. Certificates of attendance on the full course of lectures in the Theological College, during the year for which the exemptions are claimed, must be produced by Students who avail themselves of these exemptions, before presenting themselves for Examination.

[No Student will be allowed in the same session both Professional and Honour Exemptions.]

---

§ VI. MEDALS, HONOURS, PRIZES AND CLASSING.

1. GOLD MEDALS will be awarded in the B. A. Honour Examinations to Students taking the highest Honours of the First Rank in the subjects stated below, and who shall have passed creditably the Ordinary Examinations for the Degree of B. A.

The *Chapman Gold Medal*, for the Classical Languages and Literature.

The *Prince of Wales Gold Medal*, for Logic and Mental and Moral Philosophy.

The *Anne Molson Gold Medal*, for Mathematics and Natural Philosophy.

The *Shakspere Gold Medal*, for the English Language, Literature and History.

The *Logan Gold Medal*, for Geology and other Natural Sciences.

In the event of there being no candidate for any Medal, or of none of the candidates fulfilling the required conditions, the Medal will be withheld, and the proceeds of its endowment for the year may be devoted to prizes in the subjects for which the Medal was intended. For details, see announcements of the several subjects below.

2. HONOURS, of First or Second Rank, will be awarded to those Matriculated Students who have successfully passed the Examinations in any Honour Course established by the Faculty, and have also passed creditably the ordinary Examinations in all the subjects proper to their year.

3. CERTIFICATES of High General Standing will be granted to those Matriculated Students, who are placed in the First Class in the aggregate of the studies proper to their year.

4. PRIZES OR CERTIFICATES, to those matriculated Students who may have distinguished themselves in the studies of a particular class, and have attended all the other classes proper to their year.

5. His Excellency the Earl of Dufferin has been pleased to offer a Gold and a Silver Medal for competition in the Faculty of Arts. The subject for the next competition will be *The Origin and Progress of Responsible Government in the Provinces now constituting the Dominion of Canada.*

Essays for competition must be in the hands of the Dean of the Faculty of Arts, on or before October 1, 1875.

The Regulations with respect to competitors are as follows:—

1. The subject for competition shall be an Essay on any topic or period of Modern History, chosen with a due regard to the facility of gathering materials. The judges in forming their opinion shall consider no less the merit of the style than the clearness of the reasoning and the accuracy of the facts, in proof of which last, authorities must always be cited by the writers,

2. The competition shall be open to all regular students and graduates of the Faculty of Arts or of any Department of it, who have not exceeded seven years from their matriculation.

3. When sending in the Essay, the author shall conceal his name, distinguishing his composition by a motto, and sending at the same time his name sealed up in an envelope, on which the motto shall be inscribed. The envelopes of the unsuccessful candidates shall be destroyed unopened.

4. The Gold Medal shall be awarded to the best Essay and the Silver to the next best. Absolute merit shall be required in making the award of either medal. When a medal is not awarded, it may be reserved for future competition.

5. The winner of the Silver Medal in any year may in a subsequent year compete for the Gold Medal, but in no other case shall any person be awarded two of these medals.

6. The names of those who have taken Honours, Certificates, or Prizes, will be published, in the order of merit; and with mention, in the case of Students of the First and Second Years, of the schools in which their preliminary education has been received.

§ VII. ATTENDANCE AND CONDUCT.

All Students shall be subject to the following regulations for attendance and conduct :—

1. A Class-book shall be kept by each Professor and Lecturer, in which the presence or absence of Students shall be carefully noted ; and the said Class-book shall be submitted to the Faculty at all their ordinary meetings during the Session.

2. Professors shall note the attendance immediately on the commencement of their Lectures, and shall omit the names of Students entering thereafter, unless satisfactory reasons are assigned. Absence or tardiness, without sufficient excuse, or inattention or disorder in the Class-room, if persisted in after admonition by the Professor, shall be reported to the Dean of Faculty, who may reprimand the student or refer to the Faculty, as he may think proper. He may also suspend from Classes until the next meeting of the Faculty.

3. The number of times of absence, from necessity or duty, that shall disqualify for the keeping of a Session, shall in each case be determined by the Faculty. [Under this rule attendance on at least two-thirds of the lectures will in all cases be required.]

4. While in the College, or going to and from it, Students are expected to conduct themselves in the same orderly manner as in the Class-rooms. Any Professor observing improper conduct in the College building or grounds, may admonish the Student, and if necessary report him to the Dean.

5. Every student is required to attend regularly the religious services of the denomination to which he belongs, and to maintain, without, as well as within, the walls of the College a good moral character.

6. When Students are brought before the Faculty under the above rules, the Faculty may reprimand, report to parents or guardians, disqualify from competing for prizes and honours, suspend from Classes, or report to the Corporation for expulsion.

7. Any student injuring the furniture or building will be required to repair the same at his own expense, and will in addition, be subject to such other penalty as the Faculty may see fit to inflict.

8. All cases of discipline involving the interests of more than one Faculty, or of the University in general, shall be immediately reported to the Principal or, in his absence, to the Vice-Principal.

§ VIII. LIBRARY AND MUSEUM.

1. The books in the Library consist of two divisions :—1st, those which may be lent ; and, 2nd, those designated by the general term "Books of Reference," which may not, under any circumstances be removed from the Library.

2. Students may borrow books from the Library on depositing the sum of four dollars with the Librarian, and signing a receipt for the books ; such deposit to be returned to the Student on his returning the books uninjured.

3. Students may borrow not more than three volumes at one time, except on special recommendation of a Professor, and must return them within two weeks, on penalty of a fine of one shilling for the first week of detention, and two shillings and sixpence for each subsequent week.

4. A Student, incurring a fine will be debarred the use of the Library until the fine has been paid.

5. Any volume or volumes lost or damaged by a student shall be paid for by him, at such rates as the Faculty may direct, having reference to the value of the book and of the set to which it may belong.

6. Students may read in the Library at such hours as may be determined by the Faculty.

7. Professors and Lecturers may borrow any books required by them for their duties in the College, not exceeding ten volumes at any one time. Books, so borrowed must be returned at or before the end of each Session.

8. Graduates in any of the Faculties, on making a deposit of four dollars are entitled to the use of the Library, subject to the same rules and conditions as students, but they are not required to pay the Annual Library Fee.

9. Members of the McGill College Book Club are, by a regulation of Corporation, entitled to the use of the Library on the same conditions as Graduates.

10. Persons not connected with the College may consult books in the Library, on obtaining an order from any of the Governors, or from the Principal, the Dean of Faculty, or any of the Professors; and donors of books or money to the amount of Fifty Dollars may at any time consult books on application to the Librarian.

11. The Library will be open from 10 a. m. to 4 p. m., daily, except Saturdays, during the Session, and in the months of May and June. On Saturday it will be open from 1 to 4 p. m.

12. No one is allowed to enter the alcoves or to take down books from the shelves, except the Governors, Members of Corporation, Professors, the Librarian and his assistants, or those whom any of the above may accompany personally.

13. A person desiring to read or to borrow a book, which he has ascertained from the Catalogue to be in the Library, will fill up one of the blank forms provided for Readers and Borrowers respectively, and hand it to the Librarian, who will thereupon procure him the book.

14. Readers must return the books they have obtained to the Librarian, before leaving the Library.

15. No conversation that can disturb Readers is permitted in the Library.

16. The time and conditions of study in the Museum will be arranged by the Professor of Natural History.

§ IX. FEES.

Matriculation Fee for the First Year (to be paid in the Year of Entrance only), - - - - - - - - - $4 00

For the Second Year (exigible from students who enter in the Second Year, and also from those who have failed in the First Year and re-enter in the Second Year on Examination,) - - - - - - - - - - 6 00

Sessional Fee, - - - - - - - - - - 20 00

Library Fee, - - - - - - - - - - - 4 00

Gymnasium Fee, - - - - - - - - - 2 00

Undergraduates and Students in Special Courses are required to pay all the above Fees.

Partial Students are required to pay the Matriculation, Library and Gymnasium Fees, and $5 for each Class which they attend, or $20 for all the courses.

Occasional Students, or those taking one or two courses of Lectures only, and not Matriculated, are required to pay $5 per Session for each course.

The Matriculation, Library and Gymnasium Fees are exigible from students holding exemptions from Sessional Fees.

Graduates in Arts, are allowed to attend, without payment of fees, all lectures, except those noted as requiring a special fee.

The fees must be paid within a fortnight after the commencement of attendance in each session. In case of default, the Student's name will be removed from the College books, and can be replaced thereon only by permission of the Faculty and on payment of a fine of $2.

---

§ X. COURSES OF LECTURES.

1. ORDINARY COURSE.

I. CLASSICAL LITERATURE AND HISTORY.

Professor, Rev. G. Cornish, M.A., LL.D.

GREEK.

First Year.—Homer.—Iliad, Book VI.
Xenophon.—Hellenics, Book I.
Greek Prose Composition.

Second Year.—Isocrates.—The Panegyricus.
Euripides.—Medea.

Third Year.—Demosthenes.—The Olynthiacs.
Æschylus—Prometheus Vinctus.

Fourth Year.—Plato.—The Republic, Book I.

LATIN.

First Year.—Virgil.—Æneid, Book VI.
Cicero.—Epistolae Selectae.
Latin Prose Composition.

Second Year.—HORACE.—EPISTLES, BOOK I.

TACITUS.— { GERMANIA, CAPP. I.—XXVII. / AGRICOLA.

Latin Prose Composition.

Third Year.—JUVENAL.—SATIRES VIII. and X.

TERENCE.—ADELPHI.

Latin Prose Composition.

Fourth Year.—TACITUS.—HISTORIES, BOOK I.

Latin Prose Composition

In the work of the Class the attention of the Student is directed to the collateral subjects of History, Antiquities and Geography; also to the grammatical structure and affinities of the Greek and Latin Languages; and to Prosody and Accentuation.

---

2. ENGLISH LANGUAGE AND LITERATURE.

(MOLSON PROFESSORSHIP.)

Professor, VEN. ARCHDEACON LEACH, D.C.L., LL.D.

First Year.—English Language and Literature.—Anglo-Saxon Grammar, (Text-Books—Bain's English Grammar; Spalding's History of English Literature; Klipstein's Anglo-Saxon Grammar.

Third Year.—Rhetoric.—Text-Book—Whately's Rhetoric, I., II., III.

Fourth Year.—English Literature.—Text-Book—Marsh's Hand-Book.

---

3. LOGIC, MENTAL AND MORAL PHILOSOPHY.

(JOHN FROTHINGHAM PROFESSORSHIP OF MENTAL AND MORAL PHILOSOPHY.)

Professor, REV. J. CLARK MURRAY, LL.D.

Second Year.—Elementary Psychology. Text-Book—Stewart's Outlines of Moral Philosophy, Part. I. Logic, Text-Book—Whately's Logic.

Third Year.—Moral Philosophy. Text-Book—Stewart's Outlines, Part. II.

Fourth Year.—Mental Philosophy. Text-Book—Murray's Outline of Hamilton's Philosophy.

---

4. FRENCH LANGUAGE AND LITERATURE.

Professor, P. J. DAREY, M. A., B. C. L.

First Year.—DE FIVAS, Grammaire des Grammaires,
MOLIERE, l'Avare, les Femmes Savantes.
Dictation. Colloquial exercises.

Second Year.—DE FIVAS, Grammaire des Grammaires.
RACINE, Esther, Andromaque.
Translation into French—DR. JOHNSON, Rasselas.
History of the French Literature—BONNEFON, Ecrivains célèbres de la France, (to the eighteenth century.)
Dictation. Parsing. Etymology. Colloquial exercises.

Third Year.—POITEVIN, Grammaire élémentaire.
EMILE SOUVESTRE, Un Philosophe sous les toits. CORNEILLE, le Cid
Translation into French—GOLDSMITH, Vicar of Wakefield.
French Composition. Dictation.
History of the French Literature of the 18th and 19th centuries.—
BONNEFON, Ecrivains modernes.

Fourth Year.—MOLIERE, Le Misanthrope. RACINE, Les plaideurs.
Lectures on French Literature.
Translation into French, Shakspere, "As you like it."
French Composition. Dictation.
The Lectures in the Third and Fourth Years are given in French.

---

5. GERMAN LANGUAGE AND LITERATURE.

Professor, C. F. A. MARKGRAF, M. A.

First and Second Years—Ordinary Course:—This Course comprises Grammar, Reading and Analysis, Translations oral and written, and Dictation. Special regard is had to the affinities of the German with the English. Text-Books; Schmidt's German Guide (1st and 2nd Course); Adler's Progressive German Reader.

First Year.—Advanced Course:—Text-Books;—Schmidt's German Guide (1st and 2nd Course); Adler's Progressive German Reader.

Second and Third Years.—Advanced Course;—Text Books—Schmidt's German Guide (3rd Course); Readings in German Prose and Poetry (the Books to be used will be made known at the commencement of the Session.) Translations from English writers and Composition.

During this Course a series of Lectures will be delivered on the History of German Literature, from the earliest periods down to the classical age of Goethe and Schiller; closing with a brief notice of the state of German Literature at the present day.

---

6. HEBREW AND ORIENTAL LITERATURE.

Professor, Rev. A. De Sola, LL.D.

Elementary Course.—For Students of the First and Second Years,—Grammar;—Text-Book, Gesenius' Hebrew Grammar, with exercises in Orthography and Etymology. Reading; Translation and Grammatical Analysis of Historical Portions of the Scriptures—Syntax—Mishlé Shualim—Fables, &c.

Advanced Course.—(For Students of the Second, Third and Fourth Years.)—Introduction to the study of Hebrew Poetry—its spirit and characteristics. Lowth and Sarchi as Text-Books. Translation from the Psalms, Lamentations and Isaiah. Ancient compared with Modern Hebrew Poetry; the productions of Halevi, Gabirol, &c. Grammar, Exercises, &c., continued.

The Chaldee Language:—Grammar, *Mebo Halashon Aramith* of J. Jeitteles. The Chaldee portions of Scripture. Targum of Onkelos and T. Yerushalmi.

The Syriac Language:—Grammar, (Uhlemann's) and Translation.

The course comprises lectures on the above Languages and their Literature in particular, with a general notice of the other Oriental Languages, their genius and peculiarities. Comparative Philology, affinity of roots, &c., also receive due attention, while the portions selected for translation will be illustrated and explained by reference to Oriental manners, customs, history, &c.

---

7. SPANISH LANGUAGE AND LITERATURE.

Rev. Professor De Sola.

(Extra Fee for this Class, $5.00.)

The study of the Spanish Language on this continent, being generally pursued with special reference to commercial purposes, it will be sought to impart in this course, a practical knowledge of the Castilian, the richest and most harmonious of the Peninsular languages—as well as an acquaintance with its Literature.

Ollendorf's Spanish Grammar by Velazquez and Simmone, and the Reader of Velazquez, are the Text-Books employed in the Junior Class, who will also be exercised in composition by both written and oral exercises. In the Senior Class, Fernandes' Exercises, continuation of Grammar and Composition, Cervantes' Don Quixote, Quintana, Vida del Cid, and Mariana's Historia will be the subjects of study. Besides a special comparison with the Portuguese Language, a general notice, literary and historical, of the Bascuence and other dialects, will be given.

---

8. MATHEMATICS AND NATURAL PHILOSOPHY.

(Peter Redpath Professorship of Natural Philosophy.)

Professor, Alexander Johnson, M. A., LL.D.

Mathematics.—*(First Year)*—Arithmetic.—Euclid, Books, 1, 2, 3, 4, 6, with Definitions of Book 5 (omitting propositions 27, 28, 29, of Book 6). Todhunter's Edition.—Colenso's Algebra, part 1 to end of Quadratic Equations.—Galbraith and Haughton's Plane Trigonometry to end of solution of Plane Triangles.—Nature and use of Logarithms.

Mathematics.—*(Second Year)*—Arithmetic, Euclid, Algebra, and Trigonometry as before.—Remainder of Galbraith and Haughton's Plane Trigonometry—Conic Sections treated Geometrically. (The Parabola as in Drew's Conic Sections,) the definitions of the Ellipse and Hyperbola, with the fundamental properties of their tangents.—Euclid, Book XI., Props. 1 to 21: Book XII., Props. 1, 2.

The course for the Intermediate University Examination consists of the Mathematics for the first two years, except Conic Sections and Solid Geometry.

MATHEMATICAL PHYSICS AND ASTRONOMY.—*(Third Year.)*—Galbraith and Haughton's Mechanics (omitting chap. 5 of Statics), Hydrostatics, Optics and Astronomy.

At the Ordinary Examinations, answers to questions in Mechanics, on the Chapters on Friction, Collision of Bodies and Projectiles, will be taken into account only in determining the relative positions of those whose other answers shall entitle them to be placed in the First Class.

EXPERIMENTAL PHYSICS.—*(Third and Fourth Years.)*—1.—*Light.*—Theories.—Reflection.—Refraction.—Dispersion.—Interference and Diffraction.—Double Refraction.—Polarisation. 2.—*Heat.*—Dilatation of Solids, Liquids and Gases.—Specific and Latent Heat.—Radiation and Conduction.—Mechanical Theory of Heat. 3.—*Electricity.*—Statical and Dynamical; including Electro-Magnetism.—Magneto-Electricity.—Thermo-Electricity.—Diamagnetism.—Electric Measurements.—Practical Applications to Telegraph, &c. 4.—*Magnetism.* 5.—*Acoustics*,—Theory of Undulations.—Production and Propagation of Sound.—Vibration of Rods and Plates.—Vibrations of Fluids.—Musical sounds. Text-Books—Ganot's Treatise translated by Atkinson, and Tyndall on Heat. This Course extends over two years.

The Subjects for the Session 1875-76 are Light and Heat.

The Lectures in Mathematical and Experimental Physics will be illustrated by Apparatus.

---

9. GEOLOGY AND NATURAL HISTORY.

(LOGAN PROFESSORSHIP OF GEOLOGY.)

Professor, J. W. DAWSON, LL.D., F.R.S., F.G.S.

I. BIOLOGICAL COURSE.

BOTANY.—*(Second Year.)*—Vegetable Histology and Organography. Nutrition and Reproduction of Plants. Classification. Descriptive Botany. Flora of Canada. Palæobotany and Geographical Botany.

Text-Book.—Gray's Structural and Systematic Botany.

[A prize of $20 will be given for the best collection of plants, and the greatest proficiency in their determination. (*) The prize collections or duplicates of them to remain in the College Museum. Candidates must be students in Botany of the previous session.]

ZOOLOGY AND PALÆONTOLOGY. (*Third Year.*)—Elements of Animal Physiology. Classification of Animals. Characters of the Classes and Orders of Animals, with Recent and Fossil Examples.

Text-Book.—Dawson's Hand-book of Zoology, with books of reference.

(*) From the surplus increase of the Logan Fund.

II. Geological Course.

Mineralogy and Geology. *(Fourth Year.)*

(1) *Mineralogy.*—Chemical and Physical characters of Minerals, including Crystallography, the methods of determining species, and Descriptive Mineralogy; with special reference to those species most important in Geology, or useful in the Arts.

(2) *Lithology and Stratigraphy.*—Composition of Rocks and their structur on the small scale; Classification of Rocks. Arrangement of Rocks on the large scale; Stratification, Elevation and Disturbances, Denudation.

(3) *Chronological Geology and Palæontology.*—Data for determining the relative ages of formations. Classification according to age. Fauna and Flora of the successive periods. Geology of British America.

Text-Books.—Dana's Manuals of Mineralogy and Geology, with Lyell's Student's Manual.

The Lectures in Natural History will be accompanied with demonstrations in the Museum. Students in Natural History are also entitled to tickets of admission to the Museum of the Natural History Society of Montreal.

---

10. CHEMISTRY.

Lecturer, B. J. Harrington, B. A., Ph. D.

First Year.—A course of Elementary Chemistry preparatory to the course in Natural Science and Practical Science.

Text-Book.—Wilson's Lessons in Elementary Chemistry.

---

11. METEOROLOGY.

Superintendent of Observatory, C. H. McLeod, Ba. Ap. Sc.

Instruction in Meteorological Observations will be given in the Observatory, at hours to suit the convenience of the senior students.

Certificates will be granted to those Students who attain sufficient proficiency in the methods of observation.

---

12. ELOCUTION.

Mr. John Andrew, Instructor.

Students are recommended by the Faculty to avail themselves of the instructions of Mr. Andrew, who will make arrangements for evening classes to meet during the Session.

II. HONOUR COURSES.

I. CLASSICS.

B. A. HONOURS, BEING THE HONOUR COURSE FOR STUDENTS OF THE THIRD AND FOURTH YEARS.

Candidates for B. A. Honours in Classics, will be examined in the following subjects:

I. GREEK.

I.—*Greek Philosophy.*

Plato.—Republic, Books I. and II.

Aristotle.—Nicomachean Ethics, Books I. and II.

II.—*Greek History.*

Herodotus.—Book VIII. and IX.

Thucydides.—Book I.

Xenophon.—Hellenics, Books I. and II.

III.—*Greek Poetry.*

a. Epic.—Homer.—Odyssey, Books I. II. and III.

Hesiod.—Works and Days.

b. Dramatic.—Æschylus.—Prometheus Vinctus.

Seven against Thebes.

Sophocles.—Antigone.

Euripides.—Hippolytus.

Aristophanes.—The Frogs.

c. Lyric and Bucolic.—Pindar.—Olympic Odes.

Theocritus.—Idyls. I. to VI.

IV.—*Greek Oratory.*

Demosthenes.—De Corona.

Æschines.—Contra Ctesiphontem.

II. LATIN.

I.—*Roman History.*

Livy.—Books XXI., XXII. and XXIII.

Tacitus.—Annals, Books I. and II.

Histories, Book I.

II.—*Roman Poetry.*

a. Epic.—Virgil.—Æneid, Book I. to IV.

b. Dramatic.—Plautus.—Aulularia.

Terence.—Adelphi.

c. Satiric.—Horace.—Satires, Book I.

Juvenal.—Satt. VIII. and X.

Persius.—Satt. V. and VI.

III.—*Roman Oratory and Philosophy.*

Cicero.—De Imperio Cn. Pompeii.

De Officiis.

III. HISTORY OF GREECE AND ROME.

Text-Books:—

1. Grote's History of Greece, Vols. III. to VIII.
2. Arnold's History of Rome.
3. Mommsen's History of Rome.

IV. COMPOSITION.

1. Composition in Greek and Latin Prose.
2. General paper on Grammar, History and Antiquities.

The Examination for B. A. Honours will extend over four days, in the morning from 9 to 12, and the afternoon from 2 to 5.

---

2. LOGIC, MORAL PHILOSOPHY, AND MENTAL PHILOSOPHY.

Third Year.—A Course of Lectures will be given on Greek Philosophy. Besides the Lectures, the following works will form subjects of the Examination:—

Schwegler's History of Philosophy, Chapters 1 to 21.
Thomson's Outline of the Laws of Thought, Parts, I. II. and III.

Fourth Year.—The Lectures will discuss the chief modern systems of Philosophy. in connection with the existing tendencies of speculation.

Candidates for B. A. Honours will be examined on the following works, in addition to the Lectures:—

Maurice's Mediæval Philosophy.
Schwegler's History of Philosophy, Chapters 22-45.
Kant's Critique of the Pure Reason.
Kant's Metaphysic of Ethics, Books, I. and II.
Mill's Logic.
Plato's Theætetus, (in English.)

---

3. ENGLISH LANGUAGE, LITERATURE AND HISTORY.

I. *Language*

Klipstein's Anglo-Saxon Grammar.
Thorpe's Analecta Anglo-Saxonica.
Marsh's Lectures on the English Language, by Smith.
Craik's Outlines of the History of the English language.
Tyrwhitt's Essay on the Language and Versification of Chaucer.
Trench's Study of Words.
Trench's English, Past and Present.
Trench's Glossary.

II. *Literature.*

Required from the Student a general acquaintance with the works of the English Classical Authors, and a more minute study of the following portions of English Literature.

Shakespeare's Plays,

Chaucer.—Canterbury Tales; The Prologue and the Knight's Tale; the Flower and the Leaf; the House of Fame.

Spencer.—Fairie Queen; Books I., II.

Marlowe.—Faustus and Jew of Malta.

Milton.—Paradise Lost; Comus; Lycidas; L'Allegro

Dryden.—Absalom and Achitophel; Annus Mirabilis; Dedications to his Translations of Virgil's Æneid and the Satires of Juvenal.

Pope.—Dunciad; Essay on Criticism; Rape of the Lock; Eloisa and Abelard; Prefaces to his Translations of Homer's Iliad and Odyssey.

Bacon.—Essays.

Required to be read in connection with this part of the Course :—

Craik's History of English Literature.

Hallam's Literary History of Europe—the parts relating to English Literature.

Johnson's Lives of the Poets.

Dunlop's History of Fiction.

III. *History.*

Required a general acquaintance with the History of England to the year 1714, and a more minute knowledge of the Anglo-Saxon period, of the 13th and 14th centuries, and of the period from the accession of Elizabeth to that of George I.

The following books are recommended.

Kemble's Saxons in England.

Lappenberb's England under the Anglo-Norman Kings.

Pauli's Life of Alfred the Great.

Froude's History of England.

Macaulay's History of England.

Clarendon's History of the Rebellion.

Hallam's Constitutional History of England.

Longman's Life and times of Edward III.

---

4. MATHEMATICS AND PHYSICS.

MATHEMATICS.—(*First Year.*)—McDowell's Exercises on Modern Geometry, &c. Wood's Algebra.

MATHEMATICS.—(*Second Year.*)—Todhunter's Theory of Equations.—Hall's Plane and Spherical Trigonometry.—Salmon's Conic Sections, first thirteen chapters.—Hall's Calculus.—Chapters 1, 2, 3, 4, 6, 7, of Diff. Cal.; chapters 1, 2, 3, 4, 5, of Integ. Cal.

MATHEMATICAL PHYSICS.—(*Third Year.*)—Todhunter's Statics, (omitting Chapter 13.)—Tait & Steele, Dynamics of a particle.—Besant's Hydromechanics. Chap, 1, 2, 3, 5.—Walton's Mechanical and Hydrostatical Problems.—Parkinson's Optics.—Main's Practical and Spherical Astronomy, (selected course.)

B. A. HONOUR COURSE.

PURE MATHEMATICS.—Hind's Plane and Spherical Trigonometry.—Todhunter's Theory of Equations.—Hall's Differential and Integral Calculus.—Boole's Differential Equations (selected course.)—Gregory's Examples of the Calculus (omitting the last two Chapters.)—Salmon's Conic Sections.—Salmon's Geometry of Three Dimensions (selected course.)

MECHANICS.—Todhunter's Statics.—Tait & Steele, Dynamics of a Particle.—Routh's Dynamics of a Rigid Body.—Besant's Hydromechanics.—Walton's Mechanical Examples.—Walton's Examples in Hydrostatics.

ASTRONOMY.—Main's Astronomy.—Sir John Herschel's Outlines of Astronomy (Part II. on the Lunar and Planetary Perturbations.)—Godfray's Lunar Theory.

Newton's Principia, Lib. I., Sects. 1, 2, 3, 9, and 11.

LIGHT.—Lloyd's Wave Theory of Light.

HEAT,
ELECTRICITY,
MAGNETISM,
ACOUSTICS,
} As in ordinary course.

The examination for B. A. Honours will continue *four* days.

The examination for honours in the other years will continue *two* days.

Engineering students may be candidates for honours.

---

5. NATURAL HISTORY AND GEOLOGY.

Third Year. Mineralogy and use of the Blowpipe. Lithology. Elementary course in Chronological Geology. Text Books. Dana's Mineralogy and Synopsis by the professor.

For the best examinations in this Course, together with the Zoology of the third year, a prize of $10 will be given from the surplus income of the Logan Medal Fund.

Fourth Year. The Lectures will include :—

1. An advanced course in General Geology and Palæontology, in connection with which the Students will be required to read Dana's Geology and Lyell's Student's Elements.

2. Methods of observation and of conducting Geological Surveys. Practical applications of the science. Excursions for Field Work will be undertaken when practicable.

3. Canadian Geology, in connection with which the student will read Logan's Report of the Geological Survey of Canada, and Dawson's Acadian Geology.

4. Practical Palæontology and determination of species, with books of reference from the College Library, and specimens from the Museum. Text-book, Nicholson's Manual of Palæontology,

In addition to the above, the student is required to pass an examination in any one of the following subjects.

1. The systematic part of Botany, as in Gray's "Text-Book" and "Manual," and specimens illustrative of these books from the Museum.

2. Huxley's Elements of Comparative Anatomy and Dawson's Hand-book of Zoology, and specimens illustrative of the latter.

3. Dana's Mineralogy and specimens illustrative thereof from the Museum.

Candidates for Honours will be expected to attain to such proficiency as to be able to undertake original investigations in some at least of the subjects of study. Students in the Department of Applied Science may be Candidates for Honours.

Lectures in the Undergraduate Course in the Faculty of Arts.

SESSION 1875-6.

FIRST YEAR.

Hours	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9	Classics,	† Mathematics, (*a*)	* French,	† Mathematics, (*a*)	Mathematices,
10	Mathematics,	Classics,	Classics,	Classics,	Classics,
11	English,	* French,	English,	* French,	English.
12	Elementary Chemistry.	* German, *Hebrew.	Mathematics.	* German, * Hebrew.	Elementary Chemistry
1					

SECOND YEAR.

9	* French,	Mathematics. (*b*)	Logic,	Mathematics (*b*)	* German,
10	Classics,	Botany,	* French.	Botany,	* French,
11	Logic,	Classics,	† Mathematics	Classics,	Classics,
12	† Mathematics,	* Hebrew.	* German.	* Hebrew,	Logic.
1	* German				

THIRD YEAR.

9	German, (*c*)	Classics,	† Classics, † Geology	Classics,	Classics,
10	French. (*c*)	† Math. Phys. † Ment. Phil.	Mathematical Physics	Mathematical Physics	Moral Philosophy,
11	Mathematical Physics,	Zoology,	Moral Philosophy,	Zoology, † Math. Phys.	French, (*c*)
12	Classics.	(§) Experimental Physics.	Rhetoric.	Hebrew, (*c*)	§ Experimental Physics,
1		Hebrew. (*c*)			German (*c*)

FOURTH YEAR.

9	† Geology,	French, (*c*)	† Classics, † Math. Phys.	French, (c)	† Geology,
10	Geology,	German, (*c*) † Ment. Phil.	English Literature,	German, (c) † Ment. Phil.	Geology,
11	German, (*c*)	Mental Philosophy,	Classics,	Mental Philosophy,	† Math. Physics.
12		(§) Experimental Physics.	‡ Goology.	Hebrew, (*c*)	§ Experimental Physics.
1					

(*a*) During Second Term : (*c*) Optional. † For Candidates for Honours.
(*b*) " First " * The Student may take at his option French or German in the first two § From November 1st.
years, or if a Theological Student, Hebrew.
‡ For Practical work :

Classes at 1 P.M., may be changed to other hours.
Library open every day except Saturday, 1 to 4 ; The Museum will be open as arranged by the Professor of Natural History

Department of Practical and Applied Science.

IN THE FACULTY OF ARTS.

Geology and Palæontology.—J. W. DAWSON, LL.D., F.R.S., F.G.S., Professor.
English Language.—VEN. ARCHDEACON LEACH, LL.D., Professor.
German.—C. F. A. MARKGRAF, M. A., Professor.
Mathematics and Natural Philosophy.—ALEXANDER JOHNSON, LL.D., Professor.
French.—P. J. DAREY, M. A., Professor.
Civil Engineering and Applied Mechanics.—G. F. ARMSTRONG, M. A., C. E., F.G.S., Professor.
Practical Chemistry.—GILBERT P. GIRDWOOD, M.D., Professor.
Assaying and Mining.—BERNARD J. HARRINGTON, B.A., Ph. D., Professor.
Assistant to Professor of Engineering.—C. H. MCLEOD, Bachelor of Applied Science.

The courses of study in this Department are designed to afford a complete preliminary training of a Technical as well as a Theoretical nature, for such students as are preparing to enter any of the various branches of the Professions of Engineering and Surveying, or are destined to be engaged in Assaying, Practical Chemistry, and the Higher forms of Manufacturing Art.

Three distinct courses of study are provided; each of which extends over three, or under certain conditions (§ I) two years, and is specially adapted to the prospective pursuits of the student.

(1) Civil and Mechanical Engineering.
(2) Assaying and Mining.
(3) Practical Chemistry.

The Degrees conferred by University upon such Undergraduates of this Department as shall fulfil the conditions and pass the examination hereinafter stated (§IV) will be, in the first instance, "Bachelor of Applied Science," mention being made in the Diploma of the particular course of study pursued; and subsequently the degree of "Master of Engineering" on those who have pursued Course 1st, and of "Master of Applied Science" on those who have pursued either of the remaining Courses [2 and 3.]

§ I. MATRICULATION AND ADMISSION.

1. Candidates for Matriculation must present themselves for examination on the 15th September, 1875. They may, however, be admitted at a later period of the Session upon special application, and if prepared to take their places in the classes in progress.

FOR ENTRANCE INTO THE JUNIOR YEAR, the subjects for Examination will be :—

Mathematics.—Arithmetic; Algebra, to Simple Equations inclusive; Euclid's Elements, Books I., II., III.

English.—Writing from Dictation.

2. Candidates may enter in the Second or Middle year, and so reduce the course necessary for the degree in Applied Science, from three to two years, if competent to pass a satisfactory examination in the following subjects. In addition to this, those who intend to pursue Course 1st, must satisfy the Professor of Engineering that they possess a reasonable knowledge of the elements of Surveying and Levelling and of Linear Drawing and Projection, as in Castle's Text Book of Surveying, and Davidson's Linear Drawing and Orthographic Projection, and of the *Elementary* Course of Twisden's Practical Mechanics, as in Chap. 1, Chap. 2 Sect. 1, and Chap. 3, of Part 1st.

Mathematics.—

Euclid.—Books I., II., III., IV., VI., with defs. of Book V. omitting propositions 27, 28, 29, of Book VI.

Algebra.—To end of Quadratic Equations (Colenso's Alg.)

Trigonometry.—Galbraith and Haughton's Trigonometry, Chap. 1, 2, 3, 4, 6, to beginning of numerical solution of plane triangles.

Arithmetic.—Ordinary rules.—Proportion, Interest, Discount, &c., Vulgar and Decimal Fractions, Square Root.

English.—Writing from Dictation.

Chemistry.—Inorganic as in Wilson's Elements, (or the Candidate must take this subject in the Middle Year.)

Candidates must be prepared to pass in one or other of the above Examinations at the beginning of the session. Students who have passed in Class 1st or 2nd in the above subjects, in the Intermediate Examination of the University, may be admitted without further examination in such subjects.

3. Occasional Students may be admitted to the Technical Classes upon payment of special fees, (§VIII.)

§ II. EXHIBITIONS AND PRIZES.

THE SCOTT EXHIBITIONS.

FOUNDED BY THE CALEDONIAN SOCIETY OF MONTREAL IN COMMEMORATION OF THE CENTENARY OF SIR WALTER SCOTT.

Two exhibitions on this Endowment will be offered for competition at the opening of the session of 1874-5.

One Exhibition of $78, to Students entering the Middle Year.

Subjects:—Mathematics.—Ordinary cours and Honour Algebra of the Junior Year.—English of the Junior Year and Student's Hume.—Engineering and Surveying of the Junior Year.—Chemistry as in Wilson's Text Book, omitting the chapters on Light, Heat and Electricity.

One Exhibition of $120 to Students entering the Senior Year.

Subjects:—The Mathematics of the Junior Exhibition as above, with the ordinary course of the Middle Year.—Engineering and Surveying of the two previous Years, with a Report on some Engineering work.—English Grammar, Bain's.—English Composition.—Hallam's Middle Ages. chap. VIII. and IX., —English Literature, Johnson's Lives of the Poets.—Zoology, Dawson's Handbook, and more especially Fossil Animals.

3. Prizes will be awarded after each Sessional Examination to such Matriculated Students as have passed the Examinations in all the subjects of one of the regular courses of study, and have taken the first rank in the Examinations in one of the subjects.

§ III. COURSES OF STUDY.

The following are the courses of study arranged for the approaching Session, 1874-5:—

I. COURSE OF CIVIL ENGINEERING AND SURVEYING.

Junior Year.—Ordinary Mathematics of the first year in Arts, (with Honour Mathematics as far as practicable); Chemistry; English Language and Literature; French or German, Linear Drawing and Projection; Surveying and Mensuration, with use of Instruments. Elementary Practical Mechanics.

Middle Year.—Ordinary Mechanics and Mathematical Physics of the Second and Third Years in Arts (with Honour Mathematics of the Second Year as far as practicable); Experimental Physics; Zoology; French or German; Drawing—Isometrical and Perspective Projection; Levelling; Art of Construction;—Mensuration.

Senior Year.—Mathematical Physics (Honour Course of Third year in Arts, optional.) Experimental Physics; Geology and Mineralogy; French or German: Applied Mechanics; Principles of Mechanism; Drawing—Constructive and Mechanical; Construction; Designing and Estimates.

---

2. COURSE OF MINING ENGINEERING AND ASSAYING.

Junior Year.—Same as Junior Year of Civil Engineering Course.

Middle Year.—Ordinary Mathematics and Mathematical Physics of 2nd and 3rd years in Arts; Experimental Physics; Zoology Geology and Mineralogy; French or German; Drawing—Orthographic and Isometric Projection; Levelling; Construction (in part); Mensuration; Use of Blowpipe; Assaying.

Senior Year.—Geology (Honour Course); French or German; Experimental Physics; Drawing of Geological Maps and Sections, and plans of Mines; Mining and Mineral Surveying; Metallurgy; Applied Mechanics; Principles of Mechanism.

---

3. COURSE OF PRACTICAL CHEMISTRY AND ASSAYING.

Junior Year.—Same as above (with Botany.)

Middle Year.—Ordinary Mathematics of Second Year in Arts; Experimental Physics; Botany, (unless taken in the Junior Year); Zoology; French or German; Practical Chemistry.

Senior Year.—Mathematical Physics; Experimental Physics; Geology and Mineralogy; French or German; Metallurgy; Assaying.

OBSERVATORY.

Undegraduates taking any of the above courses may receive instructions in Meteorological observations from Mr. C. H. McLeod, Bac. App. Sc., in the College Observatory.

---

§ IV. EXAMINATIONS.

COLLEGE EXAMINATIONS.

There will be a Sessional Examination at the end of each year, and also a Christmas Examination, in the same manner as provided for Undergraduates in Arts; but supplemental examinations will not be allowed to students failing in the Professional or Mathematical subjects of the Middle and Senior years, except by special permission of the Faculty of Arts.

UNIVERSITY EXAMINATIONS.

I. FOR THE DEGREE OF BACHELOR OF APPLIED SCIENCE.

Candidates must pass the Sessional Examinations of the Junior and Middle Years, or if admitted in the Middle year, of that year only. They must also pass a Final Examination at the end of the Third Year, in all the subjects of that year, in addition to a special examination in Mathematics, in case of those who graduate in the course of Civil and Mechanical Engineering.

Graduates in Civil Engineering of this University may obtain this Degree and a Diploma in exchange for that which they at present hold, upon application to the Corporation through the Registrar, and upon payment of a fee of $3.

II. FOR THE DEGREE OF MASTER OF ENGINEERING.

Candidates must be Bachelors in Applied Science of at least three years' standing, and must produce satisfactory certificates of having been engaged during that time upon *bona fide* work in either the Civil or Mechanical Branch of Engineering.

They must pass with credit an examination which will extend over the general Theory and Practice of Engineering, in which papers will be set having special reference to that particular branch upon which they have, during the three preceding years, been engaged.

The examination will be held once in each year, in the second week of the month of December, and will be partly written and partly *viva voce*.

Notice of the intention of a Candidate to offer himself at any examination for this degree must be sent in, together with the necessary Certificates and Fees, not less than two calendar months before each examination is to be held.

III. FOR THE DEGREE OF MASTER OF APPLIED SCIENCE.

Candidates must be Bachelors of Applied Science of at least three years' standing, must present certificates of having been employed during that time under competent guidance in some branch of Scientific Work, and must pass with credit an examination in the Theory and Practice of those Branches of Scientific Work in which they may have been engaged. The other conditions as under the last heading.

IV. FOR THE DEGREE OF B. A. WITH THAT OF BACHELOR OF APPLIED SCIENCE.

Undergraduates in Arts who have passed the Intermediate examination may (if qualified under §1,) take the Middle and Senior years of either of the courses in Practical Science along with the Third and Fourth in Arts, and may in the Third and Fourth years omit Mental and Moral Philosophy and may substitute French and German for Latin and Greek. Spanish may be taken instead of French or German.

In addition to the subjects of the Science course, they will be required to satisfy the Examiners in the following subjects; viz; Mathematics, Natural Science, Experimental Physics and Modern Languages.

Students in Arts desirous of availing themselves of these privileges are required to take a preliminary course of Linear Drawing and Projection in the second year.

Students proceeding to the double degree, will enjoy all privileges with reference to Scholarships, Exhibitions, Prizes and Honours, in the same manner as Students in Arts.

Such Students may by permission of the Faculty be Candidates for B. A. Honours, and may be allowed to take the Examination for B. A. in their fourth year in Arts, and to take the Examination for the degree in Practical Science in the following year; or they may graduate in the Science course alone in the fourth year, and graduate in Arts in the following year. In the latter case they shall not compete for medals with the regular Students of the year.

Undergraduates in Arts of the third or fourth years, or Graduates of any University, entering the Department of Practical Science, may at the discretion of the Professors be exempted from such lectures in that Department as they may have previously attended as Students in Arts, but must pass all of the examinations.

---

§ V. ATTENDANCE AND CONDUCT.

The regulations under this head are in all respects similar to those in force for Undergraduates in Arts.

---

§ VI. LIBRARY AND MUSEUM.

Students in this Department will have the same privileges with reference to the Library and Museum, as Undergraduates in Arts.

§ VIII. FEES AND RESIDENCE.

In the Course of Engineering.—Classes in Arts, $20; Classes in Engineering, Surveying and Drawing, $25; Library, $4. In all $49 for each Session.

In the Course of Mining Engineering.—Classes in Arts. $20; Professional Classes, Junior Year, $25; Middle and Senior Years, $35. Library, $4. In all $49 to $59 for each Session,

Matriculation Fee.—(In the first year only,) $4.

Fee for Degree of Bachelor of Applied Science—$10.

Fee for Master of Engineering or Master of Applied Science.—$50.

Laboratory Students are required to purchase their own chemicals, &c. The larger articles of apparatus will be supplied by the Laboratory, the Students paying $6 per Session for their use, and being responsible for breakage.

Occasional Students may be admitted to the Lectures in Civil Engineering or Assaying; but will be required to pay an extra fee of $20, in addition to the fee of $25 in Engineering, and $5 for entrance and use of the Library.

Students in Arts may attend the Class on Blow-pipe Assaying on paying a fee of $5.

Occasional Students may attend the course of Instruction in Meteorology, on paying a fee of $5.

The exemption of Graduates from Fees applies to such of the fees in Applied Science as are payable to the College.

---

§ IX. COURSES OF LECTURES.

[For the Lectures in Mathematics, Physics, Natural Science, Modern Languages &c., see under Faculty of Arts, ante.]

I. Civil and Mechanical Engineering.

Professor.—G. F. Armstrong, M.A., C. E., F.G.S.
Assistant.—C. H. McLeod, Bac. App. Sc.

I. *Surveying and Levelling*

The object aimed at in this course is to afford the Student such instruction as will cause him to be of immediate service upon entering the office of the Engineer, or of the Surveyor; and the Lectures embrace the general principles of this important branch of Engineering, discussed under the heads of Chain and Trigonometrical Surveying, as applied to ordinary as well as special operations in the Field.

The construction, adjustment, and use of the various angular and levelling instruments are fully described and illustrated.

In addition to the Lectures, and commencing early in September, a thorough course of Engineering Field-work, in accordance with the subjoined scheme, is undertaken by the class under the guidance of Mr. McLeod, during which the practical operations of the engineer in the field are actually carried out by the students.

For the Junior Year.—General triangulation and field surveying.

For the two Senior Years.—(1) The running of trial Levels, and making of preliminary surveys between fixed points for a proposed line of Railway, incidentally illustrating the system of location from contours, and the method of road traversing. (2) The setting out and levelling of the line previously selected.

II. *Geometrical Drawing.*

Junior Year.—The course of instruction comprises, (1) the Elementary parts of the Geometrical construction of plane figures, and the principles of th Ellipse, Cycloids, Involutes and such other curves as occur in the Mechanical Arts;—in Gearing, Arches and the like:—(2) Similar constructions in Solid Geometry, or the projections in plan and elevation of various objects, and their developments. The Interpenetration of Solids, and the delineation of objects in Isometrical Projection.

Middle Year.—Perspective Projection, based upon its geometrical principles, as far as the elements of Angular Perspective.

Senior Year.—The more advanced parts of Perspective Projection and Descriptive Geometry.

III. *Construction.*

The subjects of the Lectures may be summed up as follows:—The strength and fitness of materials; the Engineering of Earth-work, Masonry, Carpentry, Structures in Iron, Common-Roads, Railways, Bridges and Viaducts, Tunnels, Canals, Works of Drainage, Irrigation and Water supply, Lighthouses, River, Harbour and Sea Works.

IV. *Practical Mechanics.*

In this course of study the analytical principles of Statics and Dynamics are applied to the determination of the conditions of the equilibrium and stability of structures in general, and to the investigation of the motion of rigid bodies; particular attention being paid to the estimation of stress in roofs and bridges, the resistance of dams and retaining walls, and to the theory of work and the motion of machines.

V. *Principles of Mechanism.*

The Lectures in this subject are designed to afford the Student an insight, (1) into the principles of the various elementary contrivances employed by mechanicians to communicate and convert motion of one kind into another, apart from the consideration of *force*; and (2) into the mode of combining such simple forms in the construction of different machines, as exemplified in the Steam Engine, Lathe, Drill, Planing Machines, &c.

The Lectures are illustrated by means of a collection of working models.

VI. *Designing and Estimates.*

The instruction given under this head is intended to enable the Student to apply practically such knowledge as has been obtained from the different Courses of Lectures; and consists in the design, specification, and estimating for such works as are usually undertaken by the Engineer.

Each Student works independently under the personal supervision of the Professor, and makes such drawings and calculations as would be needed were the structure designed to be actually carried out.

2. Assaying, Mining and Metallurgy.

Professor.—B. J. Harrington, B.A., Ph. D.

I. Use of the Blowpipe and Assaying.—(Middle Year.)

Use of the Blowpipe.—The object of this course is to enable Students, by means of the blowpipe and a few simple reagents, to detect the nature of various minerals or ores. On account of the small amount of apparatus required, and the rapidity with which accurate results may be arrived at, a knowledge of this subject will be found most useful to those engaged in geological or other field-work.

Assaying.—The course in Assaying includes lectures and practical work. Assays are made, by various methods, of gold, silver, copper, lead, iron and other ores. Examinations are also made of coal, peat, clay, &c.

II. Mining and Metallurgy.—(Senior Year.)

Mining.—Among the more important subjects taken up in this Course, the following may be mentioned:—Blasting and the nature and use of different Explosives; Quarrying; Hydraulic Mining and Sluicing; Boring and Boring Machinery; Sinking, Timbering and Tubbing of Shafts; Driving and Timbering of Levels; Underground Conveyance and Hoisting; Drainage and Pumping; Lighting and Ventilation of Mines; Special Methods of Exploitation employed in the working of metalliferous deposits or of Coal-seams; Dressing of Ores by means of hammers, stamps, rollers; riddles, buddles, &c.

Metallurgy.—A short Course of lectures, illustrated by a series of Ores and Metallurgical Products. The general properties of the metals and the nature of fuels, fire-clays, &c., are first discussed; and afterwards, the more important metals and the methods of obtaining them from their ores; by wet or dry processes, taken up in detail.

---

3. Practical Chemistry.

Professor.—Gilbert P. Girdwood, M. D.

This Course will be conducted in the large and commodious Laboratory recently constructed for the Medical Faculty. It will include a general Course of Qualitive and Quantitative Analysis, adapted to the previous training of the Student; leading in the latter part of the Course to special studies adapted to his future pursuits.

§ X. LIST OF TEXT-BOOKS AND BOOKS RECOMMENDED FOR REFERENCE.

COURSE OF CIVIL AND MECHANICAL ENGINEERING.

1.—*Text-books, required for the Classes.*

First Year, Surveying and Levelling.—Castle's "Elementary Text-Book," and Baker's "Rudimentary Treatise on Land and Engineering Surveying."
Drawing.—Davidson's "Linear Drawing and Projection," (Cassel's Technical Manuals.)

Second Year, Construction.—Rankine's "Civil Engineering."—Davidson's "Elements of Building Construction."
Drawing.—Davidson's "Isometrical and Perspective Projection."

Third Year, Applied Mechanics.—Twisden's "Practical Mechanics."—Goodeve's "Elements of Mechanism."
Drawing.—Davidson's "Practical Perspective" and "Drawing for Machinists."

2. *Books of Reference, recommended for reference, but not necessary for the Classes.*

Railway Construction.—† Haskoll's "Assistant Engineer's Railway Guide,"—Dempsey's "Practical Railway Engineer."

Hydraulics.—Stevenson's "Harbours," Rennie's Harbours, Stevenson's "Skerryvore Lighthouse," Humber "On the water supply of Cities and Towns,"—Hughes' "Water supply of Cities and Towns," Burnell's "Hydraulic engineering," Moncrief "On Irrigation," Neville's "Hydraulic Tables," † Haskoll's "Engineering Field-work."

Girders, Bridges and Roofs.—* Latham's "Girder Bridges,"—Unwin's "Iron Bridges and Roofs,"—Shield's "Strains on Iron-work Structures," Maynard's "Bridges and Roofs,"—Campin's "Roofs,"—† Humber's "Practical Treatise on cast and wrought Iron Bridges."

Strength of Materials.—Barlow's "Treatise on the strength of Materials," (Humber) † Tredgold and Hodkinson "On the strength of cast Iron."

Specifications and Estimates.—† Donaldson's "Hand-book of Specifications,"—Haskoll's "Civil Engineer's Estimate and Price Book,"—Graham's "Manual on Earthwork,"—Bidder's "Tables on Earthwork."

Surveying and Levelling.—† Butler Williams' "Practical Geodesy,"—* Castle's "Engineering Field-work,"—† Gillespie's "Land Surveying,"—† Simm's "Principles and Practice of Levelling,"—† Bruff's "Engineering Field-work."

---

* Expensive or out of Print. † In the College Library.

Mechanical Engineering.—Campin's "Treatise on Mechanical Engineering,"—Rankine's "Prime Movers,"—Fairburn "On Boilers,"—† Willis' "Principles of Mechanism,"—Grantham's "Iron-Ship Building,"—† Fairburn's "Iron-Ship Building."

General.—"† Transactions of the Institute of Civil Engineers of Great Britain."—Weale's "Series of Rudimentary Treatises" (Classes of Engineering and Architecture,)—* Humber's "Series of Modern Engineering,"—† Moseley's "Mechanical Principles of Engineering,"—† Spon's "Dictionary of Engineering,"—† Smeaton's "Reports,"—† Simm's "Tunnelling,"—Buck's "Oblique Bridges,"—† Tredgold's "Carpentry,"—Nicholson's "Carpenters' Guide," Reid's "Portland Cement,"—Molesworth's "Pocket Book of Engineering Formulæ,"—† Sopwith's "Isometrical Projection."

Course of Mining, Metallurgy, and Assaying.

Books of Reference on Mining and Ore-Dressing.

(1) Traité du Gisement et de la Recherche des Mineraux Utiles.—Burat.
(2) Ponson's Traité de l'Exploitation des Mines de Houille.
(3) Coal and Coal Mining.—Warrington Smyth.
(4) Transactions of the North of England Institute of Mining Engineers.
(5) Greenwell's Mine Engineering.
(6) Concentration and Chlorination.—Kustel.
(7) Rittinger's Aufbereitung.

Text-book on Metallurgy.—
Metals: their Properties and Treatment. Bloxam.

Books of Reference on Metallurgy.—
Percy's Metallurgy. Cooke's and Rohrig's Metallurgy. Phillip's Metallurgy. Bauerman's Metallurgy of Iron.

Books of Reference on Assaying.—
Mitchell's Manual. Kerl's Metallurgische Probirkunst.

Text-Books on Blowpipe Analysis.—
Brush's Determinative Mineralogy and Blowpipe.
Elderhorst's Blowpipe Analysis.

---

* Expensive or out of Print. † In the College Library.

Lectures in the Department of Practical Science in the Faculty of Arts.

SESSION 1875-6.

JUNIOR YEAR.

Hours.	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.
9	Elem. Pract. Mechs., (*b*)	† Mathematics, (*a*)	* French,	† Mathematics, (*a*)	Mathematics,
10	Mathematics,	Surveying.			Elem. Pract. Mechs. (*b*)
11	English,	* French,	English,	* French,	English,
12	Elementary Chemistry.	* German.	Mathematics:	* German,	Elementary Chemistry,
1					
2	Drawing, to 4.30.	Plotting, to 4.30.	Field Work, to 5.	Drawing, to 4.30.	Plotting, to 4.30.

MIDDLE YEAR.

9	* French,	Mathematics, (*b*)	Construction,	Mathematics, (*b*)	* German,
10	* German, ‡ Geology,	Surveying,	† Math. Phys. * French,	Mathematical Physics,	* French, ‡ Geology,
11	Mathematical Physics	Zoology,	Mathematics,	Zoology,	Mathematical Physics,
12	† Mathematics,	Experimental Physics,	‡ Geology, * German,	Mensuration,	Experimental Physics.
1					
2	‡ Assaying, Field Work,	Plotting, to 4.30.	‡ Assaying, Drawing,	Drawing, to 4.30.	Plotting, or ‡ Assaying
3 30	to 5. (*c*)		Levelling.		Construction.

SENIOR YEAR.

9	‡ Geology,	* German,	Construction.	* German,	‡ Geology,
10	Geology,	Mathematical Physics,	Pract Mechanics,	Drawing, or Field Work.	* Geology,
11	* French,				* French, † Math. Phys.
12	Principles of Mech. (*q*)	Experimental Physics,	Geology,		Experimental Physics.
1					
2		Drawing, to 4.30.	Drawing, to 4.30.		Designing, to 3.30,
3	Field Work, to 5.		‡ Metallurgy.	Designing, Plotting,	‡ Mining,
3.30	‡ Mining.			to 4.30.	Construction.

* Students may take either French or German.
† Optional.
(*a*) Second Term only.
(*b*) First Term only.
‡ To Students in Mining Engineering and Assaying.

Students in Practical Chemistry will take that subject at 2 P. M. in the middle year, and Assaying at 2 P. M. in the senior year, and will take the Lectures in Botany in the Junior or Middle year. The Classes in Practical Science and Experimental Physics commence on Nov. 1st. except the Field Work under the Assistant in Engineering, which begins, with the other Classes, on Sept. 15th. (*q*) Practical Mechanics until Christmas.

Faculty of Medicine.

The Principal, (ex-officio.)

Professors :—CAMPBELL.	Professors :—FENWICK.
SCOTT.	GIRDWOOD.
WRIGHT.	ROSS.
HOWARD.	OSLER.
MCCALLUM.	RODDICK.
CRAIK.	GODFREY.
	GARDNER.

Dean of the Faculty.—G. W. CAMPBELL, A. M., M.D., LL.D.

Registrar.—R. CRAIK, M. D. Demonstrator.—FRANCIS J. SHEPPERD, M.D.

Matriculation Examiner of the Faculty.—Professor H. ASPINWALL HOWE, LL.D.

The forty-third Session of the Medical Faculty of McGill University will be opened on Friday, October, 1st 1875, with a general Introductory Lecture at 11 a.m. The regular lectures will commence on Monday the 4th Oct., at the hours specified in the time table, and will be continued during the six months following.

It affords the Faculty much pleasure to be able to announce that the beautiful and commodious new building erected by the Governors of the University for the use of the Medical Faculty, has been completed and is now occupied by the Faculty.

The class tickets for the various courses are accepted as qualifying candidates for examination before the Universities and Colleges of Great Britain and Ireland, the Medical Boards of the Army and Navy, and the College of Physicians and Surgeons of Ontario.

To meet the circumstances of General Practitioners in British North America, where there is no division of the profession into Physicians and Surgeons exclusively, the degree awarded upon graduation is that of "Doctor of Medicine and Master of Surgery." This designation is also appropriate, as it agrees with the general nature and character of the previous curriculum demanded of the candidates for this double rank, as is fully specified hereafter. The degree is received by the College of Physicians and Surgeons of Lower Canada.

To intending students desirous of information upon the best manner of pursuing their studies, the following suggestions are made by the Faculty :—

Exclusive of general education, professional reading for some time previous to matriculation, is advised as a preparation, whereby familiarity with technical terms will be gained, and an insight obtained into the subjects to be brought under notice during lectures.

The student is advised to pass the Matriculation Examination in March, so that his four years of pupilage may expire at the close of a winter session. A certificate of having passed such examination before the examiners appointed by the College of Physicians and Surgeons of Ontario will be accepted by this University.

While the University regulations permit a student to graduate after three years' attendance upon lectures, provided he furnish proof that he has studied one year in addition with a private practitioner, yet he is recommended to devote four sessions to systematic instruction, as less time is scarcely sufficient for acquiring a fair knowledge of the many subjects which compose the curriculum.

Attention is recommended to be given during the First Session to the primary branches only ; during the Second Session an increase is proper, and two of the final courses may be profitably conjoined with such of the primary as are required ; while during the remaining period the curriculum is to be completed.

As daily bed-side instruction is essential to the student of medicine, the undergraduate is earnestly advised to spend at least the last two summers in availing himself of the opportunities afforded by the large hospitals—general and lying in—of our city ; in which, moreover, dresserships should be obtained.

Enregistration is necessary every Session. It is required upon entrance, or as soon afterwards as possible, and always before any class tickets are procured. The time fixed for closing the Register is annually on the 30th of November.

Class tickets are payable in advance, and if not taken out during the current session, will not be granted after its expiration.

A Medical Session or *annus medicus*, consists of enregistration and attendance upon at least two six months' courses or one six months' and two three months' courses.

COURSES OF LECTURES.

1. ANATOMY.—[Prof. Scott.] The importance of Anatomy, both descriptive and in its relations to Medicine and Surgery, is duly considered by the Professor, who employs chiefly the fresh subject in the illustration of the lectures, aided, however, by dried preparations, wax models, plaster casts of dissections, plates, &c., the full size of life.

The Dissecting Room, which is open from 8 a.m. to 10 p.m.—is large, well ventilated and supplied with every convenience, such as gas, water, &c., &c. It is under the direct supervision of the Professor of Anatomy aided by the Demonstrator. The Demonstrator is constantly in attendance during certain hours every day, to direct and instruct students in Practical Anatomy, and the Professor also daily visits the Room to superintend and examine Students engaged in dissection. Abundance of fresh material for dissection will be provided.

2. CHEMISTRY.—[Prof. Craik.]—Inorganic Chemistry is fully treated: and a large portion of the course is devoted to Organic Chemistry and its relations to Physiology. The branches of Physics bearing upon or connected with Chemistry also engage the attention of the class. For experimental illustration, abundant apparatus is possessed by the Professor, among which may be enumerated, a powerful Air Pump—Oxy-Hydrogen Microscope—Polariscope—extensive series of Models of Crystals, Electrical and Galvanic apparatus, Steam engine, &c., &c., *

3. MATERIA MEDICA.—[Prof. Wright]—This course is illustrated from a cabinet of Pharmacological objects; by plates of Medicinal Plants [Wagner, Roque, Stevenson and Churchill]; by dried specimens; by carefully prepared Microscopical objects, &c., &c; Analytical experiments with the ordinary reagents are also shown, and diagrams with other illustrations are used.

4. INSTITUTES OF MEDICINE.—[Prof. Osler]—This course comprises Histology, Physiology, and General Pathology. The lectures are illustrated by apparatus, diagrams, plates, and Microscopic preparations of the various tissues, and by Pathological specimens from the Museum. Extra demonstrations are held every Saturday afternoon. Voluntary courses of three months each on Practical Physiology and Microscopy, are organized throughout the entire year.

* Students are permitted, if desired, to be examined upon this branch separately, after having attended two six months' courses.

5. Practice of Medicine.—[Prof Howard.]—The extensive series of plates contained in the Library, (Lebert, Cruveilhier, Carswell, Hope, Alibert, Willan, Bateman, &c.,) will be employed; also Morbid preparations and models of diseased parts.

6. Surgery.—[Prof. Fenwick.]—Divided into Principles and Practice, including Surgical Anatomy and Operative Surgery, exhibited on the subject. The various surgical instruments and apparatus exhibited, and their uses and applications explained and practically illustrated.

7. Midwifery.—[Prof. McCallum.]—Including diseases of females and infants; illustrated by a series of drawings on a large scale, by humid preparations, by models in wax, by the use of the artificial Pelvis, and by cases in the wards of the Lying-in Hospital.

8. Medical Jurisprudence.—[Prof. Gardner.]—Includes Insanity and Toxicology. The modes of testing for poisons are exhibited, and post-mortem appearances illustrated by plates.

9. Clinical Surgery.—[Prof. Roddick.]—The lectures in this course are in illustration of Surgical cases under observation in the Wards of the General Hospital. Bed-side instruction is followed up daily, and all operations are performed in the presence of the class. The lectures are illustrated by cases under surgical treatment, by plates, surgical apparatus, morbid specimens, models and the use of the microscope.

10. Clinical Medicine.—[Prof. Ross.]—Taught by lectures and at the bed-side—Physical Diagnosis is taught practically, and each pupil required to take part in it. Examination of the Urine, chemical and microscopical, explained and illustrated.

11. Hygiene and Public Health.—[Prof. Godfrey.]—A course of twelve or more lectures will be delivered on this subject; and as it is one of great and increasing importance, all Students are earnestly recommended to attend.

12. Botany and Zoology.—[Prof. Dawson.]—The course in Botany is illustrated by specimens, diagrams, models, and the microscope, and special instruction will be given in microscopical examination of tissues. Students have access without any additional fee to the lectures in Zoology in the Faculty of Arts, and to the Natural History Museum of the University and the Museum of the Natural History Society of Montreal.

Prizes will be awarded at the end of each Session, to Students in Botany of the class of the previous Session, for the best *Named Collections* illustrative of the Flora of Canada. The collections, or duplicates of them to remain in the College Museum.

13. Practical Chemistry.—[Prof. Girdwood.]—Thorough instruction is given in the different departments of Practical Chemistry in the splendid new Laboratory of the Faculty, under the personal supervision of the Professor. The course includes blowpipe manipulations, qualitative and quantitative analysis, toxicological investigations, &c., &c.

Summer Course of Practical Chemistry.—For the convenience of those students who pass the summer months in the city, a summer course of Practical Chemistry has been arranged, consisting of the same number of lectures and demonstrations, and being in every way equivalent to the usual winter course.

SUMMER COURSE OF CLINICAL INSTRUCTION.

In order that Medical Students may avail themselves of the unusual opportunities for the practical study of disease afforded by the Hospitals of this city, the special course of Clinical instruction during the Summer months will be continued, and all Hospital Students will be permitted to attend it without charge. In addition to the above, daily bed-side instruction will be given during the months of July, August and September in the wards of the General Hospital by the attending Physicians.

The above course of Clinical instruction does not form a necessary part of the curriculum, but has been established to allow the student facilities for acquiring practical knowledge of disease, when his time is not otherwise occupied in attendance upon lectures.

LIBRARY AND MUSEUM.

The Library contains upwards of 4,000 volumes, including the most useful books of reference, as well as the most elementary; the works of the older authors as well as the most recent. It is open to Students without charge, under necessary regulations for the care of the books. The Museum contains a large number of preparations, chiefly Pathological; also wax and papier-mache models.

HOSPITALS.

The Montreal General Hospital affords ample means for the instruction of Students in Clinical Medicine and Surgery. The daily number of beds occupied by patients averages from 130 to 140, and during epidemic visitations has reached a much higher number. In addition to the Hospital proper, which is devoted to Medical and Surgical cases, there is a detached Hospital in which the several forms of Fever may be studied. The Governors have also erected an Hospital for Children, contiguous to the Reid Wing of the present building. The students have thus an opportunity of becoming familiar with nearly all the diseases of suffering humanity, and with the peculiarities imparted to them by infancy, adolescence, maturity and declining age.

The large number of out-door patients that are treated in the Hospital, averaging from sixty to seventy daily—supply illustrations of most of the diseases of infants and children, of very many of the eye and skin, and of those chronic and ill-defined ailments, which, as they do not require admission to the wards of an hospital, would not otherwise come under the observation of the student, although, on account of their variety and frequency, of great importance to the Physician.

The shipping contributes a great many examples of accidents and surgical cases.

The fee for a six months' ticket is Eight Dollars; for a perpetual ticket Twenty Dollars.

The Operating Room (used also for a lecture room) is so constructed as to suit the convenience of the students in obtaining a good view of the operations.

The University Lying-in Hospital is under the direction of the Professor of Midwifery. Students who have already attended one course of his lectures, are furnished with cases in rotation; and they are advised to attend this Institution as much as possible during the Summer, when as there are as many patients and not so many pupils as in winter, a larger proportion of cases falls to the share of each. Moreover, in this way more attention can be given to their duties during the winter. The fee for a six months' ticket is Five Dollars.

By the kindness of the authorities of the Grand Trunk and other Railways, arrangements have been made by which certified students of

this University will be granted return tickets from Montreal to any part of their lines at greatly reduced rates; the said tickets to hold good from the close of one session to the beginning of the next. Return tickets will also be granted for the Christmas vacation

PAST SESSION.

The total number of Students attending the Lectures of this Faculty during the past session was 129, of whom there were from—

Ontario,	67,	New Brunswick,	3,
Quebec,	48,	P. E. Island,	1,
Nova Scotia,	3,	West Indies.	2.

United States, 5.

The following gentlemen, 32 in number, have passed their Primary Examinations on the following subjects: Anatomy and Physiology, Chemistry, Materia Medica and Pharmacy, Institutes of Medicine, and Botany or Zoology, their names and residences are as follows:

NAMES.	RESIDENCE.
Campbell, James,	London, O.
Colquhoun, George,	Grantley, O.
Cook, Guy R., B.A.,	Aultsville, O.
Cooke, Wm. Henry,	Drummondville, Q.
Cream, Thos. N.,	Quebec, Q.
Crothers, Wm.,	Clarenceville, Q.
Eberle, Henry,	Morpeth, O.
Gray, John S.,	Heckston, O.
Greer, Thos. A.,	Colborne, O.
Hunt, Henry,	Notfield, O.
Johnson, Jas. B.,	Weston, O.
Lang, Christopher McL.,	Owen Sound, O.
Levi, Reuben,	Montreal, Q.
McIlmoyl, Henry A.,	Iroquois, O.
MacDonnell, Richard L., B.A.,	Montreal, Q.
McRae, George,	Renfrew, O.
Metcalf, Henry J.,	Riceville, O.
Munroe, Alex.,	Montreal, Q.
Murray, Chs. H., B.A.,	Montreal, Q.
Powell, Robert W.,	Ottawa, O.
Reddy, Herbert L., B.A.,	Montreal, Q.
Ritchie, Arthur F., B.A.,	Montreal, Q.
Robinson, Stephen J.,	Brantford, O.
Ross, Wm. P.,	Ottawa, O.
Secord, Levi,	Brantford, Q.
Smith, Wm.,	Lachute, Q.
Snider, Fred. S.,	Simcoe, O.
Stevenson, Chas. N.,	Sarnia, O.
Stevenson, Savine,	Cayuga, O.
Storrs, Arthur,	Cornwallis, N. S.
Stroud, Chas. S.,	Montreal, Q.
Young, Philip R.,	Clarenceville, Q.

The following gentlemen, 31 in number, have passed their Final Examinations on the following subjects :—Theory and Practice of Surgery, Theory and Practice of Medicine, Obstetrics and Diseases of Women and Children; Medical Jurisprudence and Hygiene, and also Clinical examinations in Medicine and Surgery conducted at the bed-side in the Hospital :—

NAME.	RESIDENCE.	THESIS.
Bain, Hugh U., B.A.	Perth, O.	Clinical Reports.
Benson, Joseph B.	Chatham, N. B.	Typhoid Fever.
Bomberry, George E.	Tuscarora, O.	Delirium Tremens.
Brossard, Jean Bte.	Laprairie, Q.	Hysteria.
Burland, William H.	Montreal, Q.	Hospital Reports.
Christie, John H., B.A.	Lachute, Q.	Vermes Intestinorum.
Dorland, James.	Adolphustown, O.	Clinical Reports.
Dowling, John F.	Appleton, O.	Typhoid Fever.
Duncan, George C.	Port Dover, O.	The Sphygmograph.
Falls, Samuel K.	Carp, O.	Acute Rheumatism.
Gilbert, Henry L.	Sherbrooke, Q.	Signs of Pregnancy.
Goodhue, Perkins J.	Danville, Q.	Congenital Syphilis.
Graham, Kenneth D.	Ottawa, O.	Morbus Coxarius.
Hanington, Ernest B.C.	Shediac, N. B.	Clinical Notes.
Hanover, William.	Packenham, O.	Acute Pleurisy.
Hume, William L.	Leeds, Q.	Acute Peritonitis.
Jamieson, Thomas A.	Lancaster, O.	Diagnosis.
Kearney, William J.	Montreal, Q.	Diseases of Menstruation.
Langlois, Onesime X.	Windsor, O.	Duties of the Accoucheur.
Mattice, Richard J.	Moulinette, O.	Acute Pleurisy.
McDermid, William.	Martintown, O.	Vaccination.
Meek, James A.	Cornwallis, N. S.	Enteric Fever.
Monk, George H.	Montreal, Q.	Pericarditis.
Nelles, James M.	Brantford, O.	Typhoid Fever.
Ross, William D.	Ottawa, O.	Tubercular Meningitis.
Scott, William F.	Hull, Q.	Locomotor Ataxy.
Tunstall, Simon J., B.A.	St. Ann's, Q.	Surgical Cases.
Ward, Michael O'B.	Montreal, Q.	Cataract.
Wigle, Hiram.	Essex Centre, O.	Abdominal Section.
Woods, Edmund J. J.	Aylmer, O.	Percussion and Auscultation.
Woolway, Christopher C.	St. Mary's, O.	Modern treatment of Fever.

Three of the above-named gentlemen, Messrs. Burland, Gilbert and Woolway, are under age. They have, however, passed all the examinations and fulfilled all the requirements necessary for graduation, and only await their majority to receive their Degree.

The following gentlemen passed the examination in Theoretical Chemistry.

Henry Greaves,	A. C. Fraser,	W. B. Elliot.
G. Cannon,	Frank L. Miner,	R. Collison.
John Brodie,	C. L. Cotton,	D. H. Cameron.
G. E. Armstrong,	G. A. Park,	L. A. Fortier.
J. A. Lane,	D. J. Quigley,	J. R. McLaren.

Students who have passed the examinations in Botany and Zoology.

BOTANY :—

Class I.	Class II.	Class III.
Ayer,	Faulkner,	Riley,
Butler,	Ryan,	Morden,
Cameron, T. D.,	Cameron, P.,	McLeod, J.,
McGuigan,	Stafford,	Collison,
Guerin,	McLeod, J. A.,	Weir,
Fraser,	Greenwood,	Irwin,
McCann,	McCrimmon,	Brennan,
McKinley,	Gillis,	Fenwick,
Vineberg,	Hutchinson,	Farley,
McLaughlan,	Henwood,	McDonald,
Pinsonneault,	Smith,	Fogg.
Campbell,	Chisholm,	
Gibson,	Rutherford,	
	Kirk,	

ZOOLOGY :—

Class I.—Butler.

Medal and Prizes.

The Medical Faculty Prizes are three in number :

1st. The Holmes Gold Medal, awarded to the graduate who receives the highest aggregate number of marks for the best examinations, written and oral, in both Primary and Final branches, as also for an inaugural thesis.

2nd. A Prize in books awarded for the best examination, written and oral, in the final branches. The gold medallist is not permitted to compete for this prize.

3rd. A Prize in books awarded for the best examination, written and oral, in the primary branches.

The Holmes Gold Medal was awarded to Simon J. Tunstall, B. A., St. Ann's P. Q.

The prize for the final examination was awarded to Joseph B. Benson, Chatham, N. B. Christopher J. Woolway was prevented by illness on the day of the public written examination from competing for honors, but he deserves special mention, as he received the full number of marks at his clinical and oral examinations. Mr. Duncan also deserves special mention for his great mechanical ingenuity in constructing a Sphygmograph with improvements of his own for measuring the force and undulations of the arterial Pulse.

The prize for the primary examination was awarded to Charles S. Murray, B. A., Montreal, Q. and Robert W. Powell, Ottawa, O. These two gentlemen received an equal number of marks.

The following gentlemen, arranged in the order of merit, deserve honourable mention :—In the Final Examination, Messrs. Hanington, Hume, Bain, Ross, Falls, Ward, and Scott. In the Primary Examination, Messrs. MacDonnell, Ritchie, Smith, Levi, Young, Reddy, Secord, Snider, Ross, Hunt, Guy R. Cook, and Sabine Stevenson.

Botany.—Professor's Prize; Nehemiah Ayer.—Zoology.—George R. Butler.

Prize for the Best Collection of Plants, C. L. Cotton. Deserving honourable mention in Botany, Messrs. Butler, F. D. Cameron, and McGuigan. Honourable Mention for collection of plants well prepared and determined, James Bell.

Practical Anatomy:—Demonstrator's prize in the Senior Class, awarded to John Brodie.

Those deserving honourable mention for care and assiduity, Messrs. A. C. Fraser, James Bell, F. L. Miner, G. E. Armstrong, and William H. Howie.

Junior Class prize awarded to N. Ayer. Honourable Mention, Messrs. A. Jamieson, W. B. Gibson, Fred. Campbell, F. J. Stafford, and J. J. Guerin.

EXTRACTS FROM THE REGULATIONS.

§ 1. *Courses of Lectures, Fees, &c.*

1st. Each Professor shall deliver at least five Lectures during the week, except in the classes of Clinical Medicine and Clinical Surgery, in which only two Lectures shall be required; and in that of Medical Jurisprudence, if extended through six months, in which case three Lectures a week will suffice.

2nd. Each Lecture shall be of one hour's duration.

3rd. Every Professor shall occasionally examine his class upon the subjects treated of in his preceding Lectures; and every such examination shall be considered a Lecture.

4th. A roll of the names of the Students attending each class shall be called from time to time.

5th. All tickets which have not a certificate of attendance attached, shall be rejected when presented as testimonials previous to examination, unless the omission shall be satisfactorily accounted for.

6th. The Fee for each class shall be $12, with the following exceptions; for that of Medical Jurisprudence, $10; for those of Clinical Medicine and

Clinical Surgery, $6 each ; for Botany and Zoology, $5 ; Practical Anatomy $5. The class-fees are payable in advance.

7th. Any Student, after having paid the Fees, and attended two courses of any class, shall be entitled to a perpetual ticket for that class.

8th. The courses of all the classes, except those of Clinical Medicine, Clinical Surgery and Medical Jurisprudence, shall be of six months' duration, the classes of Clinical Medicine and of Clinical Surgery of three months' duration, Medical Jurisprudence of three months, in which case Five Lectures a week shall be given ; or of six months, in which case only three Lectures a week shall be required.

9th. The courses shall commence on the first week of October, and with the exception of a vacation at Christmas, shall continue to the end of March.

10. The Matriculation Examination shall be that recommended by the Council for Medical Education and Registration of Great Britain. Examinations in conformity therewith, will be held the first Saturday in October and the last Saturday in March of each year. Applications may be made to the Registrar of the Faculty till the evening of the previous day. The requirements of the standard for matriculation are :—"Compulsory—English Language, including grammar "and composition ; Arithmetic, including vulgar and decimal fractions ; Algebra, "including simple equations ; Geometry, first two Books of Euclid ; Latin "translation and grammar :—and one of the following optional subjects :- Greek ; "French ; German ; Natural Philosophy, including mechanics, hydrostatics, and "pneumatics."

Graduates in Arts of recognized Universities are not required to submit to the Matriculation Examination, and a certificate of having passed this Examination before the College of Physicians and Surgeons of Ontario will be accepted by this University.

§ 2. *Qualifications and Studies of Students and Candidates for the Medical Degree.*

1. All Students desirous of attending the Medical Lectures, shall at the commencement of each Session, enrol their names and residences in the Register of the Medical Faculty, and procure from the Registrar a ticket of Enregistration, for which each Student shall pay a fee of $1 ; excepting in the Clinical Classes, in which enregistration for students of other Schools shall not be compulsory.

2. The said Register shall be closed on the last day of November, in each year, and no tickets obtained from any of the Professors shall be received without previous enregistration.

3. No one shall be admitted to the Degree of Doctor of Medicine and Master of Surgery, who shall not either :—1st, have attended Lectures for a period of at least four sessions in this University, or some other University, College, or School of Medicine, approved of by this University ; or 2ndly, have studied Medicine during at least four years, and during that time have attended Lectures for a period of at least three Sessions, either in this University, or some other University, College, or School of Medicine, approved of by this University.

4. Candidates for the final Examination shall furnish Testimonials of attendance on the following branches of Medical Education, viz :—

Anatomy. *Chemistry.* *Materia Medica and Pharmacy.* *Institutes of Medicine.* *Principles and Practice of Surgery.* *Midwifery and Diseases of Women and Children.* *Theory and Practice of Medicine.* *Practical Anatomy.*	*Of which two Courses will be required, each of six months' duration.*
Clinical Medicine. *Clinical Surgery.*	*Of which two Courses will be required each of three months' duration.*
Medical Jurisprudence. *Botany and Zoology.* *Practical Chemistry.*	*Of which one Course will be required, of three months' duration.*

Provided, however that Testimonials equivalent to, though not precisely the same as those above stated may be presented and accepted.

5th. The Candidate must give proof by ticket of having attended during twelve months the practice of the Montreal General Hospital, or that of some other Hospital approved of by this University.

6th. He must also give proof by ticket of having attended for at least six months the practice of the University or other Lying-in Hospital approved of by this University, and of having attended at least six cases of accouchement.

7th. No one shall be permitted to become a Candidate for examination who shall not have attended at least One Session of this University, and during that Session one full course of all the branches included in its curriculum.

8th. Courses of less length than the above will only be received for the time over which they have extended.

9th. Every Candidate for the Degree must on or before the Fifteenth of February present to the Dean of the Medical Faculty testimonials of his qualifications, entitling him to an examination, and also a Thesis or Inaugural Dissertation, written by himself, on some subject connected with Medical or Surgical Science, in the Latin, English or French Language. He must at the same time deliver to the Dean of the Faculty the following Certificate :—

MONTREAL, ——— 18—

I, the undersigned, being desirous of obtaining the Degree of Doctor of Medicine and Master of Surgery, do hereby declare that I have attained the age of twenty-one years, or (if the case be otherwise,) that I shall have attained the age of twenty-one years before the next graduation day, and that I am not (or, shall not be at that time) under articles as a pupil or apprentice to any Physician Surgeon, or Apothecary. [Signed,] A. B.

10th. The trials to be undergone by the candidate shall be :

(1) The private examination of his Thesis as evidence both of Medical and general acquirements, followed (if approved) by its public defence.

(2) A general examination on all the branches of Medical and Surgical Science, oral, and by written papers.

(3) The Clinical Professors shall conduct the examinations of members of their classes at the bed-side, submitting to them cases for diagnosis and treatment

in the wards of the Hospital; they shall also in estimating the standing of members of their classes, and the number of marks to be awarded, take into account the regularity of their attendance and the diligence and care they evince in reporting cases.

These examinations will be divided into Primary and Final, the former comprehending Anatomy, Chemistry, Materia Medica, Institutes of Medicine, and Botany or Zoology; the latter—Practice of Medicine, Surgery, Midwifery, and Medical Jurisprudence. It will be optional with the student to present himself for the Primary Examination at the end of the Third Session or the Third Year.

11th. The following Oath or affirmation, will be exacted from the Candidate before receiving his Degree.

SPONSIO ACADEMICA.

In Facultate Medicinæ Universitatis.

Ego, A———B———; Doctoratus in Arte Medica titulo jam donandus, Sancto coram Deo cordium scrutatore, spondeo, me in omnibus grati animi officiis, ergo hanc Universitatem ad extremum vitæ halitum, perseveraturum, tum porro artem medicam, caute, caste et probe exercitaturum; et quoad in me est, omnia ad ægrotorum corporum salutem conducentia, cum fide procuraturum; quæ denique, inter medendum, visa vel audita silere conveniat, non sine gravi causa vulgaturum. Ita præsens mihi spondenti adsit Numen.

12th. The Fee for the Degree of Doctor of Medicine and Master of Surgery shall be twenty dollars, to be paid by the successful candidate immediately after examination, together with a Registration Fee of one dollar.

13th. The money arising from the Fees of Graduation, as well as those of Enregistration, shall be applied to the enlargement of the Medical Library and Museum, and to defraying their expenses.

BOOKS RECOMMENDED TO STUDENTS.

ANATOMY.—Gray, Wilson, Ellis, Dublin Dissector, Sharpey and Quinn.

CHEMISTRY.—Fownes, Miller, Roscoe.

PRACTICAL CHEMISTRY.—Odling, Galloway, Fresenius.

MATERIA MEDICA.—Pereira's Manual by Farre, Bentley and Warrington.

INSTITUTES OF MEDICINE.—*Physiology.*—Kirke's Hand-Book, Dalton, Carpenter, Flint, Huxley. *Pathology.*—Williams' Principles of Medicine, Jones & Sieveking.

SURGERY.—Holmes' Surgery, Miller's do, Erichsen's do, Druitt's do.

PRACTICE OF MEDICINE.—Aitken, Wood, Watson, Barlow, and Flint.

MEDICAL JURISPRUDENCE.—Orfila Medicine Legal, Taylor's Jurisprudence, Guy's Forensic Medicine.

MIDWIFERY.—Churchill, Ramsbotham, Cazeaux.

———

N. B.—Boarding may be obtained at from twelve to sixteen Dollars per month.

Lectures in Medicine.--Session 1875-76.

	Monday.	Tuesday.	Wednesday.	Thursday.	Friday.	Saturday.	
ANATOMY,	9	9	9	9	9		A.M.
MEDICAL JURISPRUDENCE,	9		9		9		A.M.
SURGERY,	10	10	10	10	10		A.M.
BOTANY*		10		10			A.M.
MIDWIFERY,	11	11	11	11	11		A.M.
HOSPITAL,	12	12	12	12	12	12	NOON.
CLINICAL LECTURES,			12			12	NOON.
MATERIA MEDICA,	2	2	2	2	2		P.M.
PRACTICAL CHEMISTRY,		2		2		2	P.M.
INSTITUTES OF MEDICINE,	3	3	3	3	3		P.M.
PRACTICE OF PHYSIC,	4	4	4	4	4		P.M.
CHEMISTRY,	5	5	5	5	5		P.M.

* With microscopic work at separate hours.

Faculty of Law.

The Principal (Ex-officio).

Professors :—ABBOTT.
LAFLAMME.
CARTER.
TRENHOLME.
WURTELE.
KERR.

Professors :—DOUTRE
RAINVILLE.

Lecturers :—ARCHIBALD.
GEOFFRION.
LAREAU.

Dean of the Faculty.—Hon. J. J. C. ABBOTT, Q.C., D. C.L.

Acting Dean.—Professor WM. KERR, Q.C., D.C.L.

Registrar of the Faculty.—J. S. ARCHIBALD, B.A., B.C.L.

Matriculation Examiners of the Faculty.—Lecturers J. S. ARCHIBALD, B.A., B.C.L. and EDMOND LAREAU, B.C.L.

The Classes in Law will commence on Friday the First of October, 1875, and will extend to March 31st, 1876.

The Lectures of the Faculty will close on Friday the 3rd of March, 1876, and the Examinations will be held in the William Molson Hall, at the head of McGill College Avenue, from 3 to 6 p.m., on the 9th, 10th, 13th, 14th, 15th, 16th, and 17th days of March, 1876.

The Lecture Rooms of the Faculty are situated in the Molson's Bank Chambers, in St. James Street

The complete course of study in this Faculty extends over three years; but it may be shortened to two years, when the student matriculates in the third year of his indentures.

Students who avail themselves of the privilege of attending two years only, will nevertheless be required to pass an examination in the subjects comprised in the three years' course.

Matriculated Students who do not take the whole course are classed as Partial Students, and are not entitled to proceed to the Degree of B. C. L.

Occasional Students will be received without matriculation, for attendance on any particular series of Lectures.

Students who have completed their course of three years,—or of two years, if they have commenced in the third year of their

indentures,—and have passed a satisfactory examination, will be entitled, upon the certificate and recommendation of the Faculty, to the Degree of Bachelor of Civil Law.

COURSE OF STUDY.

FIRST YEAR.

Legal History	Lecturer LAREAU.
Civil Law:—	
Persons	Professor RAINVILLE.
Property	
Ownership	
Roman Law:—	
Institutes of Justinian, B. I.	Lecturer GEOFFRION.
Gaius, C. I.	
Maine, Chapters I. to IV.	
Civil and Commercial Law:—	
Obligations	Professor WURTELE.
Civil Procedure:—	
Introduction	Professor DOUTRE.

SECOND YEAR.

Legal Bibliography	Lecturer LAREAU.
Civil Law:—	
Rents	
Transaction	
Suretyship	
Civil Law:—	
Usufruct	Professor RAINVILLE.
Real Servitudes	
Gifts and Wills	
Substitutions	
International Law:—	Professor KERR.
Civil and Commercial Law:—	
Sales	
Roman Law:—	
Institutes of Justinian, B. II. and B. III. to Title 14.	Lecturer GEOFFRION.
Gaius, Chaps. 2 and 3	
Maine, Chapters V. to VIII.	
Commercial Law:—	
Partnership	Professor WURTELE.
Corporations	
Bills of Exchange	
Civil Procedure:—	
First Part	Professor DOUTRE.
Constitutional Law and Election Law	Lecturer ARCHIBALD.

THIRD YEAR.

Civil Law:—	
Lease	Lecturer LAREAU.
Privileges and Hypothecs	
Prescription	
Imprisonment in Civil Cases	

Civil Law:—	
Successions	Professor RAINVILLE.
Marriage Covenants	
Dower	
International Law	Professor KERR.
Commercial Law:—	
Carriage of Persons	
Insurance	
Bottomry and Respondentia	
Roman Law:—	Lecturer GEOFFRION.
Institutes of Justinian, B. III. from Title 14	
Maine, Chapters IX and X	
Civil Law:—	
Mandate	
Loan	
Deposit	
Pledge	
Evidence	
Commercial Law:—	Professor WURTELE.
Merchant Shipping	
Affreightment	
Insolvency	
Civil Procedure	Professor DOUTRE.
Second Part	
Criminal Law and Procedure	Lecturer ARCHIBALD.

FACULTY REGULATIONS.

1. Any person desirous of becoming a Matriculated Student, shall apply to the Dean of the Faculty for examination and entry in the Register of Matriculation, and shall procure a ticket of Matriculation and tickets of admission to the Lectures for each Session of the Course. (Students are requested to call on the Registrar who will furnish them with the necessary forms.)

2. Candidates for Matriculation shall pass an examination, satisfactory to the Faculty of Law, in Latin, French, English, Mathematics and Ancient and Modern History, and the books upon which such examination shall be had, shall be from time to time fixed by the Faculty.

3. Students in Law shall be known as of the First, Second and Third Years and shall be so graded by the Faculty. In each year, Students shall take the studies fixed for that year and those only, unless by special permission of the Faculty.

4. The Register of Matriculation shall be closed on the 1st of November in each year, and return thereof shall be immediately made by the Dean to the Registrar of the University. Candidates applying thereafter may be admitted on a special examination to be determined by the Faculty; and if admitted, their names shall be returned in a supplementary list to the Registrar.

5. Persons desirous of entering as Occasional Students shall apply to the Dean of the Faculty for admission as such Students, and shall obtain a ticket, or tickets, for the class or classes they desire to attend.

6. Students who have attended Collegiate courses of study in other Universities for a number of terms or sessions, may be admitted, on the production of certificates, to a like standing in this University, after examination by the Faculty.

7 All Students shall be subject to the following regulations for attendance and conduct :—

(1) A Class-Book shall be kept by each Professor and Lecturer, in which the presence or absence of Students shall be carefully noted ; and the said Class-book shall be submitted to the Faculty at a meeting to be held between the close of the lectures and the commencement of the examinations ; and the Faculty shall after examination of such class-book, decide what students shall be deemed to have been sufficiently regular in their attendance to entitle them to proceed to the examination in the respective classes.

(2) Punctual attendance on all the classes proper to his year is required of each student. Professors will note the attendance immediately on the commencement of their lectures, and will omit the names of Students entering thereafter, unless satisfactory reasons are assigned. Absence or tardiness, without sufficient excuse, or inattention or disorder in the Class-room, if persisted in after admonition by the Professor, will be reported to the Dean of the Faculty, who may reprimand the student or report to the Faculty, as he may decide. While in the building, or going to or from it, students are expected to conduct themselves in the same orderly manner as in the Class-rooms. Any Professor observing improper conduct in the Class-rooms, or elsewhere in the building, will admonish the student ; and, if necessary, report him to the Dean.

(3) When Students are reported to the Faculty under the above rules, the Faculty may reprimand, report to parents or guardians, disqulify from competing for prizes or honours, suspend from classes, or report to the Corporation for expulsion.

(4) Any Student injuring the furniture or building, will be required to repair the same at his own expense, and will, in addition, be subject to such penalty as the Faculty may see fit to impose.

(5) The number of times of absence, from necessity or duty, that shall disqualify for the keeping of a Session, shall in each case be determined by the Faculty.

(6) All cases of discipline involving the interests of more than one Faculty, or of the University generally, shall be reported to the Principal, or, in his absence, to the Vice-Principal.

8. At the end of every Session there shall be a general examination of all the Classes, under the Superintendence of the Professors, and of such other Examiners as may be appointed by the Corporation, which examination shall be conducted by means of printed questions, answered by the students in writing, in the presence of the Examiners. The result shall be reported as early as possible to the Faculty, which shall decide the general standing of the Students accordingly.

9. Each Professor shall deliver at least two Lectures in each week. Each Lecture shall be of one hour's duration ; but the Professors shall have the right from time to time to substitute an examination for any such Lectures.

10. No Student shall be considered as having kept a Session, unless he shall have attended regularly all the courses of Lectures, and shall have passed the

Sessional Examinations to the satisfaction of the Faculty, in four classes in the First and Second Years, and in five in the Third Year.

11. The Faculty shall have the power, upon special and sufficient cause shown, to grant a dispensation to any Student from attendance on any particular Course or Courses of Lectures, but no distinction shall, in consequence, be made between the Examinations of such Students, and those of the Students regularly attending Lectures. No Student shall pass for the degree of B. C. L. unless he has prepared a Thesis either in French or English which shall have been approved by the Faculty.

12. The subject of such Thesis shall be left to the choice of the Student, but it must fall within the range of study of the Faculty, and shall not exceed twenty pages of thirty lines each. Each student shall on or before the first day of February forward such Thesis to the Registrar of the Faculty, marked with the *nom de plume* which he shall adopt, and accompanied with a sealed envelope bearing the same *nom de plume* on it, and containing inside his name and the subject of his Thesis, and the envelope shall be opened in the presence of the Faculty after the final decision shall be given on the respective merits of the several Theses.

13. The Elizabeth Torrance Gold Medal, in the Faculty of Law, shall be awarded to the Student who being of the Graduating Class, having passed the Final Examination, and having prepared a Thesis of sufficient merit in the estimation of the Faculty to entitle him to compete, shall take the highest marks in a special Examination for the Medal, which Examination shall include the subject of Roman Law.

14. Every candidate before receiving the Degree of B. C. L., shall make the following declaration. :—

Ego A. B. polliceor, me, pro viribus meis, studiosum fore communis hujus Universitatis boni, operamque daturum ut decus ejus ac dignitatem amplificem, et officiis omnibus ad Baccalaureatus in Jure Civili gradum pertinentibus fungar.

15. The Fees exigible in this Faculty are as follows :—

Matriculation Fee	$ 5 00
Sessional Fee by Ordinary Students	20 00
Sessional Fee by Occasional or Partial Students, for each course	5 00
Graduation Fee, including Diploma and Case	10 00

All of which Fees shall be paid in advance. But Students already on the Books of the University shall not be required to pay any Matriculation Fee.

1. Every Candidate for the Degree of D.C.L. in Course, under Chap. VIII., Section 4, of the Statutes of the University, shall be required to pass within four years from his graduation as B.C.L., such examination as shall be prescribed by the regulations of the Faculty of Law ; unless he shall have graduated as a B.A. of this University, either in Course or *ad eundem*. And not less than two months before proceeding to the Degree of D.C.L., the Candidate shall deliver to the Faculty of Law twenty-five printed copies of a Thesis or Treatise upon a subject selected or approved by the Faculty ; such Thesis to contain not less than twenty-five octavo pages of printed matter, and possessing such a degree of literary and

scientific merit as shall in the opinion of the Faculty justify them in recommending him for that Degree. And in addition to the foregoing qualifications, the Candidate shall pay to the Secretary of the Faculty annually during term for the retention of his name on the books of the Faculty, during the said period of twelve years, a fee of two dollars, to be added to the Library fund of the Faculty.

Except as regards the Thesis, this regulation applies only to those who have taken the degree of B. C. L. subsequently to October, 1873. The examination under the above rule is as follows :—

(1) *International Law* :—

Phillimore; Wharton, Conflict of Laws; Fœlix, Droit International Privé.

(2) *Roman Law* :—

Gaii Commentarii, IV. ; Pauli Sententiæ ; Pomponii Fragmentum de origine juris D. 1. 2. ; Novellæ Justiniani, cxviii. cxxvii. ; Ortolan, Instituts de Justinien, Vol. I. ; Mommsen's History of Rome.

(3) *Constitutional Law.*—

Hallam, Constitutional History of England ; May, Constitutional History of England ; Mill, Representative Government; The British North America Act, and cases thereunder.

(4) *Philosophy of Law* :—

Ahrens, Cours de Droit Naturel ; Austin, Jurisprudence ; Markby, Elements of Law ; Maine, Ancient Law.

(5) *Droit Civil et Commercial.*—

Pothier, Obligations, Vente et Communauté ; Marcadé, Obligations, Vente et Communauté ; Pardessus, Droit Commercial.

The Examination will be written and oral ; and translation from the Latin, French or English texts, as well as familiarity with the subject, will be required.

Prizes, Honours and Standing.

Session 1874-5.

FACULTY OF LAW.

Third Year or Graduating Class.

ELIZABETH TORRANCE GOLD MEDAL, and First Prize.—DAVID MAJOR.
Second Prize, given for the best Thesis.—J. S. HALL, B.A.
Third Prize, for Second place in General Proficiency.—J. S. HALL, B.A.

Second Year.

First Prize, CHARLES J. DOHERTY.
Second Prize, STEADMAN A. LEBOURVEAU.

First Year.

First Prize, HENRY S. W. GOODHUE.

CLASS EXAMINATIONS.

COMMERCIAL LAW.—THE DEAN OF THE FACULTY, HONORABLE J. J. C. ABBOTT, Q. C., D. C. L., AND PROFESSOR WURTELE, Q. C., B. C. L.

Graduating Class.

First, DAVID MAJOR.
Second, JOHN S. HALL.

Second Year.

First, WILLIAM SCULLEN,
Second, CHARLES J. DOHERTY.

First Year.

First, HENRY S. W. GOODHUE.
Second, JOHN M. MCDOUGALL.

LAW OF REAL ESTATE. PROFESSOR LAFLAMME, Q. C., D. C. L., and PROFESSOR RAINVILLE, L.L. B. (Laval).

Graduating Class.

First, DAVID MAJOR.
Second, JOHN S. HALL.

Second Year.

First, STEADMAN A. LEBOURVEAU.
Second, CHARLES J. DOHERTY.

First Year.

First, HENRY S. W. GOODHUE.

CRIMINAL AND CONSTITUTIONAL LAW.—Professor Carter, Q.C., D.C.L., and Mr. Archibald, B. A., B. C. L.

Graduating Class.

First, David Major.
Second, Rev. A. B. Chambers.

Second Year.

First, James N. Greenshields, Steadman A. Lebourveau ; equal
Second, Samuel Hutchison.

INTERNATIONAL LAW.—Professor Kerr, Q. C., D. C. L.

Graduating Class.

First, Rev. A. B. Chambers.
Second, Thomas Nicols, M. D., LL. B.

Second Year.

First, Charles J. Doherty.
Second, Samuel Hutchison.

ROMAN LAW.—Professor Trenholme, M. A., B. C. L., and Lecturer Geoffrion, B. C. L.

Graduating Class.

First, David Major, John S. Hall; equal.

Second Year.

First, Charles J. Doherty.
Second, Francois Bisaillon.

First Year.

First, Henry S. W. Goodhue.

CIVIL PROCEDURE.—Professor Doutre, B. C. L.

Graduating Class.

First, David Major.
Second, Rodolphe Des Rivieres.

Second Year.

First, Charles J. Doherty.
Second, Paschal Tache.

First Year.

First, Frederick Monk.
Second. Francis J. Curran.

LEGAL HISTORY AND BIBLIOGRAPHY.—Lecturer Lareau, B. C. L.

Graduating Class.

First, David Major.
Second, John S. Hall.

Second Year.

First, Charles J. Doherty.
Second, Steadman A. Lebourveau.

First Year.

First, Henry S. W. Goodhue.

FACULTY OF MEDICINE.

SIMON J. TUNSTALL, B.A., of St. Ann's, Q., for Thesis and best Examination in all the branches of Study.—HOLMES GOLD MEDAL.

JOSEPH B. BENSON, Chatham, N. B., Prize for the best Examination in the Final Branches.

Students deserving Honourable mention in the Final Branches :—Messrs. HANINGTON, HUME, BAIN, ROSS, FALLS, WARD and SCOTT.

CHARLES S. MURRAY, B.A. Montreal, and ROBERT W. POWELL, Ottawa, (equal) Prize for the best Examination in the Primary Branches.

Students deserving Honourable mention in the Primary Branches :—Messrs. MACDONNELL, RITCHIE, SMITH, LEVI, YOUNG, REDDY, SECORD, SNIDER, ROSS, HUNT, COOK and SABINE STEVENSON.

C. S. SINCLAIR, Professor's Prize in Practical Chemistry.

N. AYER, Prize in Botany.

G. R. BUTLER, Prize in Zoology.

C. L. COTTON, Prize for Collection of Plants.

BUTLER, CAMERON, MCGUIGAN, Honourable mention in Botany.

JAMES BELL, Honourable mention for Collection of Plants.

JOHN BRODIE, Senior Prize in Practical Anatomy.

N. AYER, Junior Prize in Practical Anatomy.

PASSED THE EXAMINATIONS IN BOTANY AND ZOOLOGY.

Botany.

Class I.—AYER, BUTLER, CAMERON, T. D., MCGUIGAN, GUERIN, FRASER, MCCANN, MCKINLEY, VINEBERG, MCLAUGHLIN, PINSONNEAULT, CAMPBELL, GIBSON.

Class II.—FAULKNER, RYAN, CAMERON, P., STAFFORD, MCLEOD, J. A.; GREENWOOD, MCCRIMMON, GILLIS, HUTCHINSON, HENWOOD, SMITH, CHISHOLM, RUTHERFORD, KIRK.

Class III.—RILEY, MORDEN, MCLEOD, J., COLLISON, WEIR, IRWIN, BRENNAN, FENWICK, FARLEY, MCDONALD, FOGG.

Zoology.

Class I.—BUTLER.

PASSED THE EXAMINATIONS IN THEORETICAL CHEMISTRY.

Henry Greaves, G. Cannon, John Brodie, G. E. Armstrong, J. A. A. Lalen, C. Fraser, Frank L. Miner, C. L. Cotton, G. A. Park, D. J. Quigley. W. B. Elliott, R. Collison, D. H. Cameron, L. A. Fortier. J. R. McLaren.

FACULTY OF ARTS.

Graduating Class.

B. A. Honours in Mathematics and Natural Philosophy.

George H. Chandler.—First Rank Honours and Anne Molson Gold Medal.

B. A. Honours in Classics.

William F. Ritchie.—First Rank Honours and Henry Chapman Gold Medal.

B. A. Honours in Mental and Moral Philosophy.

Gustavus G. Stuart.—First Rank Honours and Prince of Wales Gold Medal.

Third Year.

R. A. Crothers.—First Rank Honours in Classics; Prize in Classics; Prize in Zoology; First Rank General Standing.

H. H. Lyman.—First Rank Honours in Natural Science; Logan Prize; Prize for Collection of Plants.

E. T. Rexford.—First Rank Honours in Mental and Moral Philosophy; Prize in Moral Philosophy; First Rank General Standing.

Archibald McGoun.—First Rank Honours in Mental and Moral Philosophy; Prize in Classics.

Hugh Pedley.—First Rank General Standing.

Passed the Sessional Examinations.

Crothers, Rexford, Pedley, Lyman, McGoun, Watson, Graham, Cox, Gray, Duffy, Matheson.

Second Year.

Eugene Lafleur.—(High School, Montreal).—Prize in English; Prize in French Prize in German; First Rank General Standing.

J. A. Newnham.—(Private Tuition).—Prize in Botany; First Rank General Standing.

Chas. S. Pedley.—(High School, Cobourg).—Prize in Logic.

Calvin E. Amaron.—(Private Tuition).—Prize in French.

W. H. Warriner.—(Private Tuition).—First Rank General Standing.

Passed the Sessional Examinations.

Lafleur, Newnham, Warriner, Gould, Pedley (C. S.), Scott, Graham (J. H.) Amaron, Russell, Robertson, McGregor (A. F.), Atwater, Anderson, Forneret,

First Year.

James Ross.—(Huntington Academy).—Prize in Classics; Prize in History; Prize in Chemistry; Prize in French; First Rank General Standing.

Rankine Dawson.—(West End Select School, Montreal).—Prize in English Literature; First Rank General Standing.

Jas. T. Donald.—(Montreal High School).—Prize in Classics; First Rank General Standing.

Allan S. McFadyen.—(Manilla High School).—Prize in Hebrew.

Passed the Sessional Examinations.

Ross (James), Dawson, Donald, Thornton, McFadyen, McKeen, Lyman (C.), McKillop, Lynn, McLaren, Ross (P. R.), McCrae.

DEPARTMENT OF PRACTICAL AND APPLIED SCIENCE.

Graduating Class.

W. B. Dawson, B.A.—Certificate of Merit in Engineering.
Alvan A. Batcheller.—Certificate of Merit in Engineering.
Arthur E. Hill.—Certificate of Merit in Engineering, and Prize in Geology.
D. F. H. Wilkins, B.A. (Tor.)—Certificate of Merit in Mining and Assaying.

Middle Year.

Willis Chipman.—(Weston High School).—Prize in Engineering Subjects; Prize in Zoology.

Passed the Sessional Examinations.

Chipman.

Junior Year.

William J. Sproul.—(Toronto High School).—Prize in Engineering; Prize in French; Prize in English.
G. L. Pasche.—(Bedford Academy).—Prize in French.
J. H. Stewart.—(Carleton Place High School).—Prize in Chemistry.

Passed the Sessional Examinations.

Sproul, Stewart (J. H.) Stewart (D. J.), Pasche, Clements, Casswell.

The Earl of Dufferin's Gold Medal, for a Prize Essay in History, has been awarded to John S. McLennan, B.A.

Students entitled to certificates for meteorological observations.

(*Arranged Alphabetically.*)

A. A. Batcheller.
G. H. Chandler.
W. B. Dawson, B.A.,
A. E. Hill.
J. Page.
D. F. H. Wilkins, B.A., (Tor.)

In the Examinations in September 1874, the following *Prize, Exhibitions* and *Scholarships* were awarded:—

Fourth Year.—George H. Chandler;—*Anne Molson Prize* in Mathematics.
Third Year.—H. H. Lyman and A. McGoun;—*W. C. McDonald Scholarships.*
A. G. Watson;—*Charles Alexander Scholarship.*
Second Year.—Eugene Lafleur, J. A Newnham, J. H. Graham;—*W. C. McDonald Exhibitions.*
R. Robertson;—*T. M. Taylor Exhibition*
First Year.—R. Dawson, J. Ross, E. T. Donald;—*W. C. McDonald Exhibition.*
C. W. Ritchie;—*Governor's Exhibition.*
E. T. Taylor;—*Jane Redpath Exhibition.*

CHRISTMAS EXAMINATIONS, 1874.

GREEK.

FOURTH YEAR.—(*No Examination.*)

THIRD YEAR.—*Class I.*—Crothers, McGoun;—Cox and Lyman (H. H.), equal. *Class II.*—Watson, Rexford, Malcolm, Graham (Jno.), Duffy. *Class III.*—Matheson, Gray.

SECOND YEAR.—*Class I.*—Lafleur, Gould, Newnham, Graham (J. H.) *Class II.*—Pedley (C. S.);—Anderson and Warriner, equal;—Scott, McGibbon, Robertson, Amaron (Calvin E.) *Class III.*—Russell;—Chubb and Forneret and McLeod, equal;—Walker.

FIRST YEAR.—*Class I.*—Ross (Jas.), McFarlane;—Dawson (Rankine) and Mc, Laren and Thornton, equal. *Class II.*—Donald and Ritchie (C.W)) and Taylor and Powell, equal;—McFayden and Ross (Peter) and Torrance, equal;—McKeen, McKillop. *Class III.*—McCrae;—Lyman (A. C.) and Lynn, equal;—Evans, McKay;—McLean and Guerin, equal;—Shearer and Sweeny, equal.

LATIN.

FOURTH YEAR.—(*No Examination*).

THIRD YEAR.—*Class I.*—Crothers;—McGoun and Watson, equal;—Rexford;—Cox and Lyman, equal. *Class II.*—Duffy, Graham (Jno.). *Class III.*—Matheson and Gray, equal;—Malcolm.

SECOND YEAR.—*Class I.*—Lafleur;—Gould and Newnham, equal;—Graham, (J. H.) and Pedley (C. S.), equal. *Class II.*—Anderson, Warriner. Scott;—McGibbon and Robertson, equal;—Amaron (C. E.) and Forneret and Russell, equal. *Class III.*—Chubb, Walker, McLeod.

FIRST YEAR.—*Class I.*—Donald, Ross (Jas.), Macfarlane, Ritchie (C.W.), Taylor, *Class II.*—Thornton;—McKeen and Lawford, equal;—Dawson (Rankine), McCrae, McLaren, Lyman (C. A.). *Class III.*—Guerin and Powell, equal;—McKillop;—Ross (Peter) and McFayden and Torrance, equal;—Sweeny, Lynn, McKay, Evans, McLean.

ELEMENTARY PSYCHOLOGY.

SECOND YEAR.—*Class I.*—Warriner, Pedley (C. S.), Scott, Gould, Lafleur, Russell, Robertson, Amaron, McGibbon, Newnham. *Class II.*—Walker, Forneret. *Class III.*—Graham and McLeod, equal;—McLennan, Anderson, McPhee, McDougall, Chubb.

MORAL PHILOSOPHY.

THIRD YEAR.—*Class I.*—Rexford, McGoun;—Lyman (H. H.) and Crothers, equal. *Class II.*—Duffy, Cox. *Class III.*—Graham (J.), Watson, Matheson, Malcolm, Gray, McDougall.

MENTAL PHILOSOPHY.

FOURTH YEAR.—*Class I.*—Stuart, McKibbin, Rutledge, Silcox. *Class II.*—Knox. Cossar. *Class III.*—Millyard, Whiteside.

ENGLISH LANGUAGE AND LITERATURE.

THIRD YEAR.—*Class I.*—McGoun, Rexford. *Class II.*—Crothers, Matheson, Graham, Duffy, Watson. *Class III.*—None.

FIRST YEAR.—*Class I.*—Ross (James), Dawson (R.) and Donald, equal;—Lawford, McFayden, McLaren, McCrae. *Class II.*—Powell, McKeen;—Ross (Peter), Ritchie (C. W.) and McKay, equal;—Thornton, Evans, Lyman (A. C.), Torrance, Lynn, McLean, McKibbon (R.), Shearer. *Class III.*—McFarlane, McKillop. Guerin, McIntosh, Imrie, Sweeny.

FRENCH.

THIRD YEAR.—*Class I.*—McGoun. *Class II.*—Lyman (H. H.). *Class III.*—Graham,

SECOND YEAR.—*Class I.*—Lafleur, Amaron, Gould, Graham (J. H.). *Class II.*—Forneret. *Class III.*—Ohubb, McGibbon, Robertson. (Jno.), Duffy.

FIRST YEAR.—*Class I.*—Ross (James), Donald, Powell;—Dawson (R.) and Guerin, equal. *Class II.*—Ritchie (C. W.), McKillop, Lawford, Evans, Thornton, Taylor, Torrance, Macfarlane, McLaren. *Class III.*—McKibbin, Lyman (A. C.) and Lynn, equal;—McKeen, Sweeny, Imrie.

GERMAN.

THIRD YEAR.—*Class I.*—Watson.

SECOND YEAR.—(Senior Division.)—*Class I.*—Lafleur.
(Junior Division.)—*Class II.*—Chubb.

FIRST YEAR.—*Class I.*—Lawford. *Class II.*—Evans. *Class III.*—Guerin.

HEBREW.

SENIOR CLASS.—Warriner, Scott, McLood, Russell, Anderson.

JUNIOR CLASS.—Ross, McKay, McCrae, Boudreau;—McKillop and Shearer, equal;—Lynn, Newnham, McFayden, Pedley (C. S.), McLean, Sweeny, McIntosh.

MATHEMATICS.

SECOND YEAR.—*Class I.*—Scott, Graham (J. H.), Lafleur, Newnham. *Class II.*—Gould. Warriner. *Class III.*—Pedley (C. S.), Russell, Ewing, Walker Robertson, Forneret, Anderson, McGibbon.

FIRST YEAR.—*Class I.*—McFayden, Shearer;—Dawson (R.) and Ross (Peter) equal. *Class II.*—Lynn and Taylor (E. T.), equal;—Donald;—Lawford and McCrae and Torrance (F.), equal. *Class III.*—Imrie, McKay;—Macfarlane and McKillop and Ross (James), equal;—Powell, Thornton, Lyman (A. C.), McKibbin (R.), Guerin.

MATHEMATICAL PHYSICS.

FOURTH YEAR.—*Class I.*—Chandler. *Class II.*—None. *Class III.*—McKibbin (W. M.), Stewart.

THIRD YEAR.—*Class I.*—Rexford, Lyman (H. H.), Crothers (R. A.). *Class II.*—None. *Class III.*—McGoun and Watson, equal:—Cox, Duffy, Graham (J.), Gray.

EXPERIMENTAL PHYSICS.

FOURTH YEAR.—*Class I.*—Chandler, Stuart. *Class II.*—None. *Class III.*—Ritchie (W. F.).

THIRD YEAR.—*Class I.*—Lyman (H. H.) and Rexford equal;—Duffy, Crothers;—Graham and Ewing equal;—McGoun. *Class II.*—Watson. *Class III.*—Gray, Joseph, Matheson.

Anne Molson Mathematical Prize.

Chandler (G. H.).

NATURAL SCIENCE.

FOURTH YEAR.—(*Geology*)—*Class I.*—McKibbin (W. M.), Silcox. *Class II.*—Whiteside, Routledge, McLennan (D.).

THIRD YEAR.—(*Zoology*)—*Class I.*—Crothers;—Lyman (H. H.) and McGoun, equal. *Class II.*—Cox, Ewing, Watson. *Class III.*—Matheson, Duffy, Hughes, Graham (Jno.), Malcolm, McLennan (D.).

SECOND YEAR.—(*Botany*)—*Class I.*—Lafleur and Scott, equal;—Warriner, Gould, Newnham, Robertson, Amaron. *Class II.*—McLeod, Cossar, Pedley (C. S.), Walker, Forneret, Anderson, Russell, Chubb. *Class III.*—McPhee, Knowles, McGibbon, McLennan, Graham (J. H.), Hughes

CHEMISTRY.

FIRST YEAR.—*Class I.*—Dawson (R.), Ross (James), Donald, Thornton, Ross. (Peter R.) *Class II.*—Taylor, McKibbin (R.);—Lyman (A. C.) and McKay, equal;—Lynn;—Torranco and McCrae, equal;—Lawford, Macfarlane;—McLaren and McKillop, equal;—Powell. *Class III.*—Whiteside, McFadyen, Evans, McKeen, Guerin, Shearer, Ritchie (C.W.) Imrie, McIntosh.

DEPARTMENT OF PRACTICAL AND APPLIED SCIENCE.

ENGINEERING.

SENIOR YEAR.—*Class I.*—Dawson (W. B.). *Class II.*—Batcheiler, Ross (G.), Hill, Hawley. *Class III.*—Frothingham;—Page and Wilson, equal.

MIDDLE YEAR.—*Class I.*—Chipman. *Class II.*—Thomas, Hetherington. *Class III.*—None.

JUNIOR YEAR.—*Class I.*—Sproul. *Class II.*—Pasche, Nelson, Ross (Phil.), Casswell. *Class III.*—Clements.

MINING.

SENIOR YEAR.—*Class I.*—None. *Class II.*—None. *Class III.*—Wilkins.

MATHEMATICS.

JUNIOR YEAR.—*Class I.*—Sproul. *Class II.*—Clements, Pasche. *Class III.*—Nelson, Ross (Philip), Casswell.

MIDDLE YEAR.—*Class I.*—Chipman. *Class II.*—Reid. *Class III.*—Thomas (A.C.).

MATHEMATICAL PHYSICS.

MIDDLE YEAR.—*Class I.*—Chipman. *Class II.*—None. *Class III.*—Thomas (A. C.), Hethrington.

SENIOR YEAR.—*Class I.*—Dawson (W. B.). *Class II.*—Page, Hawley. *Class III.*—Hill, Ross, Batchelier.

EXPERIMENTAL PHYSICS.

MIDDLE YEAR.—*Class I.*—Chipman, Thomas (A. C.), Hethrington. *Class II.*—Reid. *Class III.*—Rogers (R. B.).

SENIOR YEAR.—*Class I.*—Batcheller, Frothingham, Wilkins;—Page and Wilson, equal;—Hawley, Ross (G.), Hill. *Class II.*—None. *Class III.*—Rodger.

CHEMISTRY.

JUNIOR YEAR.—*Class I.*—Sproul and Chipman (Middle Year), equal. *Class II.*—McNie, Ross (P. D.), Pasche. *Class III.*—Nelson, Howard, Clements, Casswell.

GEOLOGY.

SENIOR YEAR.—*Class I.*—Hill, Hawley, Page, Ross, Batcheller. *Class II.*—Frothingham, Wilson, Rodger. *Class III.*—None.

ZOOLOGY.

MIDDLE YEAR.—*Class I.*—Chipman. *Class II.*—Hethrington, Reid, Thomas.—*Class III.*—Rogers (R. B.).

ENGLISH.

JUNIOR YEAR.—*Class I.*—Sproul, Ross (Philip). *Class II.*—McNie, Pasche, Nelson.

FRENCH.

SENIOR YEAR.—*Class I.*—Dawson (W. B.). *Class II.*—Frothingham, Hill, Ross;—Page and Hawley, equal;—Batcheller. *Class III.*—Wilson, Rodgor, Wilkins.

MIDDLE YEAR.—*Class I.*—None. *Class II.*—Chipman, Thomas. *Class III.*—None.

JUNIOR YEAR.—*Class I.*—Sproul, Pasche. *Class II.*—Ross (Ph.), Nelson. *Class III.*—Clements. Howard.

GERMAN.

MIDDLE YEAR.—*Class I.*—None. *Class II.*—Hethrington. *Class III.*—None.

SESSIONAL EXAMINATIONS, 1875.

ORDINARY COURSE IN ARTS.

GREEK.

B. A. ORDINARY.—*Class I.*—Ritchie (W. F.). *Class II.*—McKibbin. *Class III.*—None.

THIRD YEAR.—*Class I.*—Crothers, (Prize); McGoun, Pedley (Hugh), Watson Rexford. *Class II.*—Cox, Lyman (H. H.), Graham (Jno.). *Class III.*—Gray and Matheson, equal; Duffy, Malcolm.

SECOND YEAR.—*Class I.*—Lafleur, Gould, Graham, (J. H.);—Newnham and Pedley (C. S.) and Warriner, equal. *Class II.*—Amaron;—Robertson and Scott, equal;—Anderson, Russell, McGregor;—Forneret and Atwater, equal. *Class III.*—McLeod, Chubb, Walker.

FIRST YEAR.—*Class I.*—Donald (prize),—Ross (Jas.), Dawson (Rankine). *Class II.*—Thornton, McFadyen;—McCrae and Ritchie (C.), equal; McKeen and Ross (Peter) and Taylor. (E. T.). equal, Lyman (C.);—McKillop and McLaren and Evans, equal. *Class III.*—Guerin, Sweeny, Lynn.

LATIN.

B. A. ORDINARY.—*Class I.*—Ritchie, (W. F.). *Class II.*—McKibbin. *Class III.*—None.

THIRD YEAR.—*Class I.*—Crothers, McGoun (Prize);—Pedley (Hugh), Roxford, Watson, Lyman (H. H.). *Class II.*—Graham (Jno.), Cox, Duffy. *Class III.*—Gray and Malcolm and Matheson, equal.

SECOND YEAR.—*Class I.*—Lafleur, Gould, Newnham, Pedley (C. S.), Graham (J. H.). *Class II.*—Warriner, Scott, Robertson, Russell, Atwater, Anderson, McGregor, Amaron. *Class III.*—Forneret, Chubb.

FIRST YEAR.—*Class I.*—Ross (Jas.), (Prize);—Donald, Dawson (Rankin);—McKeen and McLaren, equal. *Class II.*—Lawford, Thornton, McFadyen—Lyman (C.) and Ritchie (C.), equal;—Torrance, McCrae; Ross (Peter) and Taylor (E. T.), equal. *Class III.*—Lynn and McKillop and Sweeny, equal;—Guerin, Ewing, Evans.

HISTORY.

FIRST YEAR.—*Class I.*—Ross (Jas.) (Prize);—Dawson (Rankine);—Donald and McKillop, equal;—Thornton. *Class II.*—Lynn and McCrae, equal; Lyman (C.) and McFadyen and McKeen and Ritchie (C.), equal; McLaren, Lawford;—Ross (Peter) and Torrance, equal; *Class III.*—Guerin.

LOGIC, AND MENTAL AND MORAL PHILOSOPHY.

B. A. ORDINARY.—(*Mental and Moral Philosophy*) *Class I.*—Stuart. *Class II.*—McKibbin, Taylor (E. M.). (*Mental Philosophy*) *Class I.*—None. *Class II.*—Cossar and Silcox, equal. *Class III.*—Knox, Whitelde.

THIRD YEAR.—(*Moral Philosophy*) *Class I.*—Rexford (prize);—McGoun, Pedley (H.); Crothers and Lyman, equal. *Class II.*—Duffy, Graham (J.), Cox, Watson, Gray, Hughes. *Class III.*—Matheson;—McDougall and Malcolm, equal.

SECOND YEAR.—(*Logic*) *Class I.*—Pedley (C. S.), (prize),—Lafleur, Robertson Warriner, Amaron, Bland, Newnham, Graham (J. H.);—Russel and Gould, equal;—Walker. *Class II.*—Capsey;—Cassels and McGibbon, equal;—Atwater and Scott, equal;—McGregor, Forneret, Anderson;—Levy and McLeod, equal. *Class III.*—McDougall, Chubb.

ENGLISH LITERATURE.

THIRD YEAR.—(*Rhetoric*) *Class I.*—McGoun, Crothers, Rexford. *Class II.*—Duffy, Watson, Capsey, Graham, Matheson. *Class III.*—None.

SECOND YEAR.—*Class I.*—Lafleur, (prize);—Gould, Warriner, Atwater, Scott, Pedley (C. S.), Russell, Amaron. *Class II.*—McGregor, Newnham, Chubb, Robertson, McGibbon, Forneret, Walker, Anderson, Graham, McLeod.

FIRST YEAR.—*Class I.*—Dawson, (prize);—Donald, Sproul, McFadyen, Ross, (James), McKeen, Ritchie, Thornton. *Class II.*—McKillop, McKibbin, McCrae, Ross (Peter), Lyman, McLaren, Lynn, Lawford, Guerin, Sweeny, Torrance. *Class III.*—None.

FRENCH.

THIRD YEAR.—*Class I.*—None. *Class II.*—McGoun. *Class III.*—Duffy, Capsey, Graham

SECOND YEAR.—*Class I.*—Amaron and Lafleur, equal;—(prize). *Class II.*—Gould, Forneret, Atwater. *Class III.*—McGibbon, Chubb, Graham.

FIRST YEAR.—*Class I.*—Ross, (J.), (prize); Dawson, (R.) and Donald. equal;—Lawford, Guerin. *Class II.*—McLaren, Torrance, Ritchie (C.), McKillop, Evans. *Class III.*—Lyman, (C.), McKibbin, Thornton, Sweeny, Walcott, Lynn, McKeen.

GERMAN.

THIRD YEAR.—*Class I.*—Watson. *Class II.*—Crothers.

SECOND YEAR.—(*Senior Division.*)—*Class I.*—Lafleur (prize). *Junior Division.*—*Class III.*—Chubb.

FIRST YEAR.—*Class I.*—Lawford (prize).

HEBREW.

JUNIOR CLASS.—*Class I.*—McFadyen (prize);—Boudreau, McGregor and McCrae equal. *Class II.*—C. S. Pedley, Newnham, McKillop. *Class III.*—McIntosh.

SENIOR CLASS.—*Class I.*—Warriner, Scott, Russell. *Class II.*—Anderson and Pedley (H.), equal. *Class III.*—None.

MATHEMATICAL PHYSICS.

B. A. ORDINARY.—*Class I.*—Chandler. *Class II.*—None. *Class III.*—Stuart, Ritchie (W. F.), Taylor (E. M.), McKibbin (W. M.).

THIRD YEAR.—*Class I.*—Rexford, Crothers. *Class II.*—Lyman (H. H.), Pedley (Hugh). *Class III.*—Watson, Duffy; Gray, and McGoun, equal; Graham (J.), Matheson, Cox.

MATHEMATICS.

SECOND YEAR.—*Class I.*—Graham, (J. H.), Newnham. *Class II.*—Lafleur, Scott, Robertson. *Class III.*—Warriner, Ewing, Pedley (C. S.), Atwater and Gould and Russell, equal;—McGregor, Amaron, Anderson, Forneret, Walker.

FIRST YEAR.—*Class I.*—Ross(James), Thornton, McFadyen. *Class II.*—Dawson(R.), Lynn, Donald, Ross (P. E.). *Class III.*—Taylor (E. T.);—Lyman (C) and McKeen, equal; Lawford, McKillop, McCrae; Evans and McLaren, equal.

EXPERIMENTAL PHYSICS.

B. A. ORDINARY.—*Class I.*—Chandler and Stuart, equal;—*Class II.*—None. *Class III.*—Ritchie (W.F.).

THIRD YEAR.—*Class I.*—Graham (J.);—Rexford and Lyman equal;—Ewing *Class II.*—Crothers. *Class III.*—Duffy and McGoun and Watson equal; Gray.

B. A. HONOURS IN MATHEMATICS AND NATURAL PHILOSOPHY.—George H. Chandler. First Rank Honours, Anne Molson Gold Medal.

NATURAL SCIENCE.

B. A. ORDINARY.—(*Geology*)—*Class I.*—McKibbin. *Class II.*—Silcox, Whiteside. *Class III.*—None.

THIRD YEAR.—(*Zoology*)—*Class I.*—Crothers (Prize); Pedley, Lyman. *Class II.*—Cox. *Class III.*—Graham;—McGoun and Watson, equal;—Ewing, McCarroll, Matheson.

THIRD YEAR HONOURS.—Lyman, (H.H.) First Rank Hon., Logan Prize.

SECOND YEAR.—(*Botany*)—*Class I.*—Newnham (Prize);—Warriner, Lafleur, Amaron, Robertson, Scott. *Class II.*—Forneret, Gould;—Anderson and McGregor and Pedley, equal;—Russell, Cossar. *Class III.*—Graham, Atwater, Walker, Chubb, McLeod, Hughes.

FIRST YEAR.—(*Chemistry*)—*Class I.*—Ross, (James) (Prize);—Dawson (R.) and Thornton, equal;—Taylor (E. T.), Donald. *Class II.*—McKillop. *Class III.*—Lyman (E.), McKeen, Lynn, McKibbin, Ross (P. R.). McLaren, Torrance, McFadyen, Lawford.

DEPARTMENT of PRACTICAL and APPLIED SCIENCE.

SURVEYING AND LEVELLING

MIDDLE YEAR.—*Class I.*—Chipman, Hetherington. *Class II.*—None. *Class III.*—None.

JUNIOR YEAR.—*Class I.*—Sproul, Nelson. *Class II.*—Stewart (D. A.), Stewart (J. F.). *Class III.*—Casswell;—Pasche and Clements, equal.

DRAWING.

SENIOR YEAR.—*Class I.*—Batcheller, Dawson. *Class II.*—Hill and Ross, equal; Frothingham and Page, equal. *Class III.*—Wilson.

MIDDLE YEAR.—*Class I.*—None. *Class II.*—Chipman. *Class III.*—Hetherington.

JUNIOR YEAR.—*Class I.*—None. *Class II.*—Sproul and Nelson, equal. *Class III.*—Clements, Casswell, Stewart (D. A.); Pasche, Stewart (J. H.), equal.

CONSTRUCTION.

SENIOR YEAR.—*Class I.*—Dawson, Hill. *Class II.*—Batcheller and Page, equal; Ross;—Frothingham and Hawley, equal. *Class III.*—Wilson.

MIDDLE YEAR.—*Class I.*—Chipman. *Class II.*—Hetherington. *Class III.*—None.

APPLIED MECHANICS.

SENIOR YEAR.—*Class I.*—Wilkins, Dawson, Ross, Batcheller. *Class II.*—Hill, Page, Wilson. *Class III.*—Frothingham.

PRINCIPLES OF MECHANISM.

SENIOR YEAR.—*Class I.*—Dawson, Wilkins;—Batcheller and Page, equal. *Class II.*—Ross; Hill and Hawley, equal. *Class III.*—Wilson, Frothingham.

DESIGNING AND ESTIMATES.

SENIOR YEAR.—*Class I.*—Hill, Batcheller. *Class II.*—Dawson. *Class III.*—Page, Frothingham;—Ross and Wilson, equal.

MINERAL SURVEYING AND DRAWING.

SENIOR YEAR.—*Class I.*—Wilkins.

AGGREGATE CLASS LIST.

Engineering Course.

SENIOR YEAR.—*Class I.*—(Entitled to special certificate)—Dawson, Batcheller Hill. *Class II.*—Ross, Page. *Class III.*—Frothingham, Wilson.

MIDDLE YEAR.—*Class I.*—Chipman, (prize). *Class II.*—Hetherington. *Class III.*—None.

JUNIOR YEAR.—*Class I.*—Sproul, (prize); Nelson. *Class II.*—Stewart (D. A.) and Stewart (J. H.), equal. *Class III.*—Clements and Casswell, equal; Pasche.

MINING.

SENIOR YEAR.—*Class I.*—Wilkins, (Prize).

METALLURGY.

SENIOR YEAR.—*Class II.*—Wilkins.

MATHEMATICAL PHYSICS.

SENIOR YEAR.—*Class I.*—Dawson. *Class II.*—Batcheller. *Class III.*—Wilson, Hill, Ross (George), Hawley, Page, Frothingham.

MIDDLE YEAR.—*Class I.*—Chipman. *Class II.*—None. *Class III.*—None.

MATHEMATICS.

MIDDLE YEAR.—*Class I.*—Chipman. *Class II.*—None. *Class III.*—Hetherington,

JUNIOR YEAR.—*Class I.*—Sproul, Stewart (D. A.) Stewart, (James). *Class II.*—Clements. *Class III.*—Casswell, Pasche.

EXPERIMENTAL PHYSICS.

SENIOR YEAR.—*Class I.*—Hawley, Ross, Wilkins. *Class II.*—Batcheller, Page, Hill. *Class III.*—Frothingham, Wilson.

MIDDLE YEAR.—*Class I.*—None. *Class II.*—Chipman. *Class III.*—Hetherington.

GEOLOGY.

SENIOR YEAR.—*Class I.*—Hill, (prize); Page. *Class II.*—Wilson, Hawley, Frothingham. *Class III.*—Ross, Batcheller.

ZOOLOGY.

MIDDLE YEAR.—*Class I.*—Chipman, (prize). *Class II.*—None. *Class III.*—Hetherington.

CHEMISTRY.

JUNIOR YEAR.—*Class I.*—Stuart (J. H.), (Prize). *Class II.*—Chipman, Sproul. *Class III.*—Stuart (D. A.), Pasche, Nelson, Casswell.

ENGLISH LITERATURE.

JUNIOR YEAR.—*Class I.*—Sproul, (Prize); Stewart (J. H.). *Class II.*—Stewart (D. A.), Nelson, Pasche, Casswell.

FRENCH.

SENIOR YEAR.—*Class I.*—Dawson (W.B.). *Class II.*—Frothingham. *Class III.*—Wilkins; Ross and Hawley, equal; Batcheller, Hill, Page, Wilson.

MIDDLE YEAR.—*Class I.*—None. *Class II.*—None. *Class III.*—Chipman.

JUNIOR YEAR.—*Class I.*—Pasche, (prize); Sproul, (prize.) *Class II.*—Stewart (J. H.), Stewart (D. H.). *Class III.*—Clements, Nelson.

GERMAN.

MIDDLE YEAR.—*Class III.*—Hetherington.

Scholarships and Exhibitions.

SESSION 1874-75.

SCHOLARSHIPS (Tenable for Two Years.)

Year of Commencement	Name of Scholar.	Subject of Examination.	Annual Value.	Founder or Donor.
1873	Chandler, G. H.	Science.	$125	W. C. MacDonald, Esq.
1873	Ritchie, W. F..	Class. & Mod. Lan.	125	W. C. MacDonald, Esq.
1874	Lyman, H. H..	Nat. Science.	125	W. C. MacDonald, Esq.
1874	McGoun, Ar...	Class. & Mod. Lan.	125	W. C. MacDonald, Esq.
1874	Watson, A. J...	Class. & Mod. Lan.	120	Chas. Alexander, Esq.

EXHIBITIONS (Tenable for One Year.)

Second Year.

Name of Exhibitioner.	Annual Value.	Founder or Donor.
Lafleur Eugene.....	$125	W. C. MacDonald, Esq.
Newnham, J. A.	125	W. C. MacDonald, Esq.
Graham, John H.....	125	W. C. MacDonald, Esq.
Robertson, R.....	100	T. M. Taylor, Esq.

First Year.

Name of Exhibitioner.	Annual Value.	Founder or Donor.
Dawson, Rankine	$125	W. C. MacDonald, Esq.
Ross, James.....	125	W. C. MacDonald, Esq.
Donald, J. T.....	125	W. C. MacDonald, Esq.
Ritchie, Charles W.....	100 to 120	Governors.
Taylor, E. T.....	100	Mrs. Jane Redpath.

Students of the University.

Session ~~1875-76~~ 1875

McGILL COLLEGE.

FACULTY OF LAW.

Ambrose, John D. L.,	Montreal, Q
Beaulieu, Napoleon H.,	Montreal, Q
Bergeron, Horace,	Sherbrooke, Q
Bisaillon, Francois Joseph,	Laprairie, Q
Buckley, John W.,	Montreal, Q
Capsey, George,	Bedford, Q
† Chambers, A. Busteed,	Ireland
† Couillard, Edouard	Montreal, Q
Curran, Patrick J.,	Montreal, Q
Dansereau Clement,	Centre Coeur, Q
Desmarais, Odilon,	Joliette, Q
Desaulniers, Dionis,	Yamachiche, Q
† Des Rivieres, Rodolphe,	Montreal, Q
Doherty Charles J.,	Montreal, Q
Dorion, Louis C. W.,	Montreal, Q
Duval, Louis K.,	Three Rivers, Q
Ethier, Marc,	St. Alexan, Q
Forget, Adelard,	Ste. Marie de Monnoir, Q
Gelinas, A.,	Trois Rivières, Q
Glass, James M.,	Montreal, Q
Goodhue, Henry S. W.,	Danville, Q
Greenshields, James N.,	Danville, Q
† Galbraith, William,	Montreal, Q
† Hall, John S.,	Lachine, Q
† Huntington, Russ Wood.	Montreal, Q
Hurd, Augustine,	Montreal, Q
† Hutchinson, Samuel,	N S.
Knapp, Frederick,	Prescott, O
Lasalle, Lucien,	Three Rivers, Q
Lebourveau, Steadman A.,	Eaton, Q
Lamire, Auguste,	l'Assomption, Q
† Major, David,	Montebello, Q
Messier, Damase, Ste. M.,	de Monnoir, Q
McDonald, John S.,	P. E. I
McDougall, John M.,	Three Rivers, Q
McCorkell, John, C. J. S.	Montreal, Q
McKay Stephen A.,	Montreal, Q
Monk, Frederick.	Montreal, Q
† Nichols, T, M.D., LL.B.,	Montreal, Q
Norris, John Francis,	Montreal, Q
Palliser, Joseph,	Lachute, Q
Patterson William J. B.,	Montreal, Q
Pelletier, Louis C,	Lavaltrie, Q
Perodeault, Narcisse,	Montreal, Q
Purcell, John D.,	Montreal, Q
Scallan, William,	Joliette, Q
† Stephens, Chas. Henry	England
Taché, Paschal,	Q

† B.C.L. 1875.

FACULTY OF MEDICINE.

Alcorn John H.	Montreal, Q
Armstrong, Geo. E.,	Montreal, Q
Ayer, Nehemiah	Woodstock, N.B
† Bain, Hugh U.,	Perth, O
Beers, William G.,	Montreal Q
Bell, James	North Gore, O
† Benson, Joseph B.,	Chatham, N.B
† Bomberry, Geo. E.,	Tuscarora, O
Brennan, Peter	Perth, O
Brodie, John	North Georgetown, Q
† Brossard, J. B. J.,	Laprairie, Q
Brown, Algernon T.,	Acton Vale, Q
Brown, N. J.,	Stanstead, Q
† Burland, Wm. H.,	Montreal, Q
Butler, Geo. R.,	Yarmouth, N.S
Cameron, D. H.,	Perth, O
Cameron, J. D.,	Williamstown, O
Cameron, Paul	Williamstown, O
Campbell, Fredk.,	London, O
Campbell, James	London, O
Cannon, Gilbert	Ramsay, O
Chisholm, Alex. P.,	Lochiel, O
† Christie, John H.,	Lachute, O
Clarke, F. G. B.,	Collingwood, O
Collison, Robt.	Matilda, O
Colquhoun, Geo.,	Williamsburg, O
Cook, Guy R.,	Aultsville, O
Cooke, Wm. H.,	Drummondville, Q
Cotton, C. L.,	Cowansville, Q
Coyle, H. W.,	Berthier, Q
Craig, Thornton	Glengarry, O
Cream, Thos. W.,	Quebec, Q
Crothers, William	Clarenceville, Q
Dettmers, O. W. G.,	Montreal, Q
Dickinson, Salter M.,	Cornwall, O
† Dorland, James,	Adolphustown, O

† Dowling, John F, Appleton, O
† Duncan, Geo., C., Port Dover O
Eberlé, Harry A., Morpeth, O
Elliott, Wm. B. Iroquois, O
† Falls, Samuel K., Carp, O
Farley, James T., St. Thomas, O
Faulkner, Danl. W., Sidney, O
Fenwick, Chas. S., Montreal, Q
Fortier, Alex. L., River David, Q
Fraser, Alex. C., Wallaceburg, O
Fraser, John R. Hawkesbury, O
Gibson, Wm. B., Dunham, Q
† Gilbert, Henry L., Sherbrooke, Q
Gillis, John, A. F., Miscouche, P. E. I
† Goodhue Perkins J. Danville, Q
† Graham, Kenneth D., Ottawa, O
Gray, John S., Herkstone, O
Greaves, Henry C., Barbadoes, W.I
Greenwood Fred, St. Catherines, O
Greer, Thos. A. Colborne, O
Guerin, James J., Montreal, Q
† Hanington, E. B. C., Shediac, N. B
† Hanover, William, Pakenham, O
Henderson, Andrew, Montreal, Q
Henwood, Alfred J., Brantford, O
Holiday, Caleb S., Montreal, Q
Howey, Wm. H., Delhi, O
† Hume, Wm. L., Leeds, Q
Hunt, Henry Nutfield, O
Hutchinson, John A., Bluevale, O
Irwin, John L. Ottawa, O
Jamieson, Alex., Glengarry, O
† Jamieson, Thos. A., Glengarry, O
Johnson, James B., Weston, O
† Kearney, Wm. J., Montreal, Q
Kirk, Geo. W., Cornwall, O
Lane, John A., Prescott, O
Lang, C. McL., Sydenham, O
† Langlois, Onesime Windsor, O
Levi, Reuben Montreal, Q
Livingstone, Joseph Hamilton, O
MacDonald, Malcolm C., Montreal, Q
MacDonnell, R. L., M.A., Montreal, Q
McCann, John J., Millbury, Mass. U.S
McCrimmon, Milton Ancaster, O
† McDermid William Martintown, O
McGuigan, William Stratford, O
McIlmoyl, Henry A., Dundas, O
McKay, Geo., Laguerre, O
McKinlay, John K., Perth, O
McLeod, John Tingwick, Q
McLeod, John A., Lancaster, O
McMillan, Allan D., Dundee, Q
McRae, Geo., Renfrew, O
† Mattice, Richd. J., Moulinette, O
† Meek, James A., Canning, N.S
Metcalf, Henry J., Riceville, O
Miner, F. L. M., Abercorn, Q
† Monk, Geo. H., Montreal, Q
Morden, James G., Waterdown, O
Munro, AJex., Montreal, Q
Murray, Chas. H., Montreal, Q
† Nelles, Jas. M., Brantford, O
Park, Geo. A., St. Marthe, Q
Pinsoneault, B., Montreal, Q
Powell, Robt. W., Ottawa, O
Quinones, E., Porto Rico, W. I
Quigley, Daniel J., Lochiel, O
Reddy, Herbert L. Montreal, Q
Riley, Oscar H., Franklin, Vt., U. S
Ritchie, Arthur F., Montreal, Q
Robinson, Stephen J., Brantford, O
Robinson, W. G., Ferrisburgh, Vt., U.S
† Ross, William D., Ottawa, O
Rutherford, M. C., Waddington, N. Y
† Scott, Wm. F. Hull, Q
Secord, Levi, Brantford, O
Smith, D. F., Listowel, O
Smith, William, Lachute, Q
Snider, F. S., Simcoe, O
Stafford, Fred., J., Montreal, Q
Stevenson, Chas. W., Sarnia, O
Stevenson, Sabin, Cayuga, O
Storrs, Arthur, Cornwallis, N.S
Stroud, Charles S., Montreal, Q
Thiel, A. K., Chicago, Ill., U. S
† Tunstall, Simon J., St. Anne's, Q
Vineberg, Hiram, W., Montreal, Q
† Ward, M. O'B., Montreal, Q
Weir, Charles, Thorold, O
† Wigle, Hiram, Kingsville, O
† Woods, J. J. E. Aylmer, Q
† Woolway, C. J., St. Mary's, O
Young, P. R. Clarenceville, Q

† M. D., 1875.

FACULTY OF ARTS.

Undergraduates in Arts.

Amaron, Calvin, Berthier, Q
Anderson, James, A, Ottawa, O
Atwater, Albert, W., Montreal, Q
† Chandler, George, H., Brome, Q
Chubb, Sydney, C., Brooklyn, U.S
Cox, Jacob Whitman, Cornwallis, N.S
Crothers, Robert, A., Venice, Q
Dawson, Rankine, Montreal, Q
Donald, James Thomas, Montreal, Q
Duffy, Thomas Durham, Q
Evans, Edward, A., Montreal, Q
Forneret, George, Edwd., Montreal, Q
Gould, Charles, H., Montreal, Q
Graham, John H., Ormstown, Q
Graham, John, Kemptville, O
Gray, William, H., Fleurant, Q
Guerin, Edward, J., Montreal, Q
Lafleur, Eugene, Montreal, Q
Lyman, Henry Herbert, Montreal, Q
Lyman, Edward Clarence, Montreal, Q

Lynn, John Edward,	Owen Sound, O
Malcolm, Finlay,	Montreal, Q
McFadyen, Allan, L.,	Brock. O
MacFarlane, A. H.,	Knowlton, Q
McGibbon, Robert, D.,	Montreal, Q
McGregor, Archibald, F.,	Manilla, O
McGoun, Archibald,	Montreal, Q
McIntosh, David, C.,	Flos, O
† McKibbin, Wm. M.,	Montreal, Q
McKay, George, D.,	West Zorre, O
McKeen, Edward, Thos.,	Sydney, C.B
McKillop, Ronald.	Inverness, Q
McLaren, David, C.,	Montreal, Q
McLean, Charles,	High Branch, P.E.I
McLennan, Finlay,	Montreal, Q
McLeod, John R.,	Bru e, O
McOuat, John, L.,	Lachute, Q
Malcolm, Finlay,	Scotland O
Matheson, John,	Skye, O
Newnham, Jarvis, A.,	Montreal, Q
Papineau, B. J.,	Montreal, Q
Pedley, Hugh,	Cold Spring, O
Pedley, Chas. Stowell.	Cold Spring, O
Powell, Chas., Beckley,	Ottawa, O
Rexford, Elson,	South Bolton, Q
† Ritchie, W F.,	Montreal, Q
Ritchie, Charles, W.,	Montreal, Q
Robertson, Robert.,	Barrington, N.S
Ross, James,	Dewittville, Q
Ross, Peter, R.,	West Zorre, O
Russell, W. D.,	Peterborough. O
Scott, Matthew, H.,	Eramosa, O
Shearer, W.,	Ottawa, O
† Stuart, Gustavus, G.,	Quebec, Q
Sweeney, James Fielding.	Montreal, Q
† Taylor, Ernest, M.,	Potton, Q
Taylor, Ewd. Thornton,	Montreal, Q
Thornton, Hartwell W.,	New Richmd. Q
Torrance, Frederick,	Montreal, Q
Watson, Alfndus, J..	Huntingdon, Q
Warriner, William, H.,	Montreal, Q
Walker, George, F.,	Waddington, O

† B. A., 1875.

Department of Practical and Applied Science.

† Batcheller, Alvan A.,	Bedford, O
Casswell, James Albert,	Digby, NS.
Clements, A. J. L.,	Yarmouth, N. S
Chipman, Willis,	Harlem, O
‡ Cook, Alex. W..,	Brantford, O
† Dawson, W. B., B.A.,	Montreal, Q
Ewing, William,	Melbourne, Q
† Frothingham, John, J.,	Montreal, Q
Hawley, David F.,	Aird, Q
Hetherington, Frederick,	Quebec, Q
† Hill, Arthur E.,	Sydney, C. B
Howard, William Hy,	St. Andrew, Q
Jones, Thomas Henry,	Brantford, O
Laing, Abner Brown,	Keene, O
‡ Mayrand James,	Montreal, Q
M·Lennan, Duncan,	Montreal. Q
McNie, John Clarke,	Perth, O
† Page, John,	Ottawa. O
Pasche, Geo. Louis,	Grande Ligne. Q
‡ Patton, Arthur D.,	Montreal. Q
Reid, Malcom, S.,	Philipsburg, O
Robb, John,	Lombardy, O
Rodger, D.,	Montreal, Q
Rogers, Richard B.,	Asburnham, Q
† Ross, George,	Beaverton, O
Ross, Philip Dansken,	Montreal,Q
Sproul, Wm. Johnston,	Schomberg, O
Stewart,Duncan Alex.,	Balderston, O
Stewart, James H.,	Jonesville, O
Thomas, Alfred C..	Montreal, Q
† Wilkins, David F. H.,	Hamilton, O
† Wilson. Robert A.,	O

(‡ Partial or Occasional.)

† Bac. Ap. Sci. 1875.

Partial and Occasional.

Black, J. R., B.A..	Montreal, Q
Boudreau, M. F.,	Montreal, Q
Capsey, George,	Stanbridge, Q
Cossar, Andrew C.,	Montreal, Q
Edmunds, Alf. W.,	Montreal, Q
Ells, Robert, B.A.,	Montreal, Q
Haughton, Ernest J.,	Montreal, Q
Hughes, Silas J.,	Wellington, O
Holiday, Thomas,	Montreal, Q
Hooper, Angus W.,	Montreal, Q
Imrie, Andrew W.,	Spencerville, O
Joseph, Henry,	Montreal, Q
Knox, William,	Montreal, Q
Levy, Joseph,	Montreal, Q
Lawford, John B.,	Montreal, Q
Laing, Rev. Robt , B.A.,	Montreal, Q
McKibbin, Robt..	Montreal, Q
McLennan, Duncan,	Montreal, Q
McCarroll, John,	Melford, O
McCrae, David L ,	Brussels, O
McPhee, Norman,	Dalkeith, O
McDougall, John M.,	Three Rivers, Q
McLennan, J. S., B.A.,	Montreal, Q
Morton, A. C.,	King, O
Millyard, Reuben,	Thornhill, O
Phinney, G. C.,	Wilmot, N.S
Routledge, William L.,	Toronto, O
Silcox, J. B ,	Frome, O
Thiel, A. R.,	Marquette, Mich
Thomas, Alexander,	Coburg, O
Whiteside, Arthur,	St. John, N.B
Wolcott, Joseph A.,	Keesville, N.Y

MORRIN COLLEGE.

Session 1875.

FACULTY OF ARTS.

Bland, Solem G.,	Lachute, Q	Irvine, George H.,	Quebec, Q
Cassels, Richard S.,	Quebec, Q	McDonald, Simon	Quebec, Q
Cattenach, John C.,	Dalhousie Mills, O	Paterson, James T.,	Windsor, Q
Dewey, Finlay McN.,	St. Remi Q	Wurtele, Alfred G. G.,	Quebec, Q
Fales, Ebenezer	Quebec, Q		

Besides 79 Occasional Students, attending Classes in Chemistry, Mathematics, English Literature and Modern Languages.

SUMMARY.

Students in Law, McGill College,		48
" in Medicine "		130
" in Arts "	Undergraduates	91
	Occasional	32
" " Morrin College,	Undergraduates,	9
	Occasional,	79
Total number of Students,		389
Deduct entered in two Faculties,		4
		385
Teachers in Training in Normal School,		118
Pupils in Model Schools,		340
Total Students and Pupils,		843

Passed the University Examinations.

Session 1874-5.

FACULTY OF LAW.

PASSED FOR THE DEGREE OF B. C. L. *

Chambers, A. Busteed,
Couillard, Edouard,
DesRivieres, Rodolphe,
Galbraith, William,
Hall, John S., B.A.,
Huntington, Russ Wood.
Major, David,
Messier, Damase,
Nichols, Thomas, M.D., LL.B.
Stephens, Charles Henry,

BACHELOR OF CIVIL LAW PROCEEDING TO THE DEGREE OF D. C. L.

Charles Peers Davidson, M.A., B. C. L.

FACULTY OF MEDICINE

PASSED FOR THE DEGREE OF M.D., C.M. *

Bain, Hugh U., B.A.,	Perth, O	Jamieson, Thomas A.,	Lancaster, O
Benson, Joseph B.,	Chatham, N.B	Kearney, William J.,	Montreal, Q
Bomberry, George E.,	Tuscarora, O	Langlois, Onesime X.,	Windsor, O
Brossard, Jean Bte.,	Laprairie, Q	Mattice, Richard J.,	Moulinette, O
Burland, William H.,	Montreal, Q	McDermid, William,	Martintown, O
Christie, John H., B.A.,	Lachute, Q	Meek, James A.,	Cornwallis, N.S
Dorland, James,	Adolphustown, O	Monk, George H.,	Montreal, Q
Dowling, John F.,	Appleton, O	Nelles, James M.,	Brantford, O
Duncan, George C.,	Port Dover, O	Ross, William D.,	Ottawa, O
Falls, Samuel K.,	Carp, O	Scott, William F.,	Hull, Q
Gilbert, Henry L.,	Sherbrooke, Q	Tunstall, Simon J., B.A.,	St. Ann's, Q
Goodhue, Perkins J.,	Danville, Q	Ward, Michael O'B.,	Montreal, Q
Graham, Kenneth D.,	Ottawa, O	Wigle, Hiram,	Essex Centre, O
Hamington, Ernest, B.C.,	Shediac, N.B	Woods, Edmund J. J.,	Aylmer, Q
Hanover, William,	Packenham, O	Woolway, Christopher C,	St. Mary's, O
Hume, William L.,	Leeds, Q		

PASSED THE PRIMARY EXAMINATIONS *

Campbell, James,	London, O	Metcalfe, Henry J.,	Riceville, O
Colquhoun, George,	Grantley, O	Munro, Alex.,	Montreal, Q
Cook, Guy R., B.A.,	Aultsville, O	Murray, Chas. H., B.A.,	Montreal, O
Cook, Wm. Henry,	Drummondville, Q	Powell, Robert W.,	Ottawa, O
Cream, Thos. N.,	Quebec, Q	Reddy, Herbert L., B.A.,	Montreal, Q
Crothers, Wm.,	Clarenceville, Q	Ritchie, Arthur F., B.A.,	Montreal, O
Eberle, Henry,	Morpeth, O	Robinson, Stephen J.,	Brantford, O
Gray, John S.,	Heckston, O	Ross, Wm. D.,	Ottawa, O
Greer, Thos. A.,	Colborne, O	Secord, Levi,	Brantford, O
Hunt, Henry,	Nottield, O	Smith, Wm.,	Lachute, O
Johnson, Jas. B.,	Weston, O	Snider, Fred S.,	Simcoe, O
Lang, Christopher McL.	Owen Sound, O	Stevenson, Chas. N,	Sarnia, O
Levi, Reuben,	Montreal, Q	Stevenson, Sabine,	Cayuga, O
McIlmoyl, Henry A.	Iroquois, O	Storrs, Arthur,	Cornwall, O
MacDonell, Rich. L., B.A.,	Montreal, O	Stroud, Chas. S.,	Montreal, Q
McRae, George,	Renfrew, O	Young, Philip R.,	Montreal, Q

* Alphabetically arranged.

FACULTY OF ARTS.

PASSED FOR THE DEGREE OF B. A.

In Honours.

(Alphabetically Arranged.)

GEORGE H. CHANDLER.
WILLIAM F. RITCHIE.
GUSTAVUS G. STUART.

Ordinary.

Class I.—None.
Class II.—None.
Class III.—ERNEST M. TAYLOR.
WM. M. MCKIBBIN.

PASSED IN THE INTERMEDIATE EXAMINATION.

McGill College.

Class I.—EUGENE LAFLEUR.
J. A. NEWNHAM.
WM. H. WARRINER.

Class II.—CHAS. H. GOULD.
CHAS. S. PEDLEY.
MATTHEW H. SCOTT.
JOHN H. GRAHAM.
CALVIN E. AMARON.
W. D. RUSSELL.
ROBERT ROBERTSON.
ARCHD. MCGREGOR.
ALBERT W. ATWATER.
JAS. A. ANDERSON.
GEORGE FORNERET.

Class III.—NONE.

Morrin College.

Class I.—S. G. BLAND.
Class II.—ROBERT CASSELS.
Class III.—NONE.

BACHELORS OF ARTS PROCEEDING TO THE DEGREE OF M. A.

JOHN ALLWORTH, B. A.
WILLIAM J. CROTHERS, B. A.
WILLIAM J. DEY, B. A.
ALEXANDER E. DUNCAN, B. A.
ROBERT ELLS, B. A.
EDWARD H. KRANS, B..A
DUNCAN W. MCLENNAN, B. A.
ROBERT W. WALLACE, B A.

PASSED FOR THE DEGREE OF BACHELOR OF APPLIED SCIENCE.

Course of Civil and Mechanical Engineering,

(In order of Relative Standing.)

William B. Dawson, B. A.
Alvan A. Batcheller.
Arthur E. Hill.
George Ross.
John Page.
Robert A. Wilson.
John J. Frothingham.

Course of Mining and Assaying,

David F. H. Wilkins, B. A., Toronto.

Graduates of the University.

DOCTORS OF DIVINITY.

* Bethune, Rev. John, (ad eundem) 1843. * Falloon, Rev. Daniel, [Hon.].1844.

DOCTORS OF LAWS AND OF CIVIL LAW.

* Abbott, Christopher, B. C. L. [D. C. L., in course].....1862
Abbott, Hon. J. J. C., B. C. L., [D. C. L. in course].....1867
Adamson, Rev. Wm. A., [D.C.L. hon].....1850
Badgley, Hon. Wm. A., [D. C. L. hon].....1843
Bancroft, Rev. C., D.D. [LL.D. hon].....1870
Bond, Rev. Wm. M.A., [LL.D. hon]1870
Browne, Dunbar, M.A., B. C. L. [D. C. L. in course].....1871
Campbell, George, W., M.A., M.D., [LL.D. hon].....1875
Chamberlin, B., M.A., B. C. L. [D. C. L. in course].....1867
Chauveau, Hon. Pierre, J. O., [L.L.D hon] 1857
Cordner, Rev. John, [LL.D. hon]..1870
Cornish, Rev. George, M.A., [LL.D. in course].....1872
Davidson, Charles Peers, M.A., B. C. L. [D. C. L. in course].....1875
Davies, Rev. Benjamin, Ph. D. [LL.D. hon].....1856
Dawson, John William, M.A., [LL.D. hon].....1857
DeSola, Rev. A., [LL.D. hon].....1858
Douglas, Rev. Geo., [LL.D. hon]..1870
Doutre, Gonsalve, B.C.L. [D.C.L. in course].....1873
* Falloon, Rev. D., D.D., [LL.D. hon.].....1862
Girouard, Desiré, B.C.L., [D.C.L. in course].....1874
* Head, Right Hon. Sir Edmund W., Baronet, M.A., [LL.D. hon].1863
Hemming, Edward J., B.C.L., [D.C.L. in course].....1871
* Holmes, Andrew F., M.D., [LL.D. hon].....1858
Howe, Henry A., M.A., [LL.D. hon].....1870
Hunt, T., Sterry, M.A., [LL.D. hon].....1865
Kerr, William H., [D. C. L. in course].....1873
Kirby, James M.A., B. C.L. D.C.L. in course].....1874
[LL.D. in course].....1874
Laflamme, R. G., B.C.L. [D.C.L. in course].....1873
Lawson, G., Ph. D., [LL.D. hon]...1862
* Lafrenays, P. R., B.C.L., [D.C.L. in course].....1873
Leach, Rev. Wm. T., M.A., D. C. L. hon].....1849
[LL.D. hon].....1857
Logan, Sir William, E., Kt., [LL.D. hon].....1856
* Lundy, Rev. Francis, [D.C.L. hon] 1843
Lyall, Rev. W., [LL.D. hon]..... 1864
MacVicar, Rev. D. H., [LL.D. hon]1870
Meredith, Edmund A., B. C. L., [LL.D. hon].....1857
Miles, Hy. H., M.A., [LL.D. hon]..1866
Morris, Alexander, M.A., B.C.L. [D. C.L. in course].....1862
Rollit, Albert K., LL.D. London Univ. [LL.D. ad eun].....1871
* Smallwood, Charles, M.D., [LL.D. hon].....1856
* Smith, William, [LL.D. hon].....1858
* Valieres, de St. Real, Hon. J. R., [D. C. L. hon] 1844
Wickes, Rev. W. D., [LL.D. hon]..1868
Wilkes, Rev. Henry, D.D., M.A., [LL.D. hon].....1870

* Deceased.

Adsetts, John.....1866
Alexander, Robt. A.....1871
Alguire, Duncan C.....1874
† Allen, Hamilton.....1872
Alloway, Thomas Johnson.....1869
Anderson, Alexander.....1866
* Anderson, John C.....1865
Archer, Thomas.....1869
Ardagh, Jonson.....1869
* Arnoldi, Daniel.....[Hon].....1847
Atkinson, Robt.....1862
Ault, Alexander.....1860
Ault, Charles.....1855
Ault, James F.....1854
Ault, Edwin D.....1868
Austin, Fred. John.....1862
Aylen, John.....1857
Aylen, James.....1863
Backhouse, John B.....1870
Bain, D. S. E., Staff Surgeon Maj.1868
Bain, Hugh U.....1875
Baird, James.....1870
Baker, Albert.....1848
Barclay, George.....1870
* Barnston, James.....[ad eun]....1856
Battersby, Charles.....1861
Baynes, George Aylmer.....1869
Beattie, David.....1862
Beaudet, Alfred.....1865
Beaudry, Lewis H.....1871
Bell, John. M, A.....1866
Bell, Robt. W.....1873
Bellew, Alfred.....1852
Bergeron, Joseph.....1870
Bergin, Darby.....1847
Bessey, William E.....1863
Bender, Prosper.....1865
Benson, Joseph B.....1875
Bibeau, Jean G. J.....1843
Blackader, Alex D., B. A.....1871
Blacklock, John J.....1851
* Blanchet, J. B.....1863
Blair, Robt. C.....1865
Bligh. John W.....1865
Bogart, Irvine.....1869
Bomberry, Geo. E.....1875
Boulter, George Henry.....1851
* Boyer, Lewis.....1842
* Boylan, Andrew A.....1857
* Bowman, William Edward.....1860
Bower, Silas, J.....1865
Bradley, William.....1869
Brathwait, Francis H.....1863
Brandon, John.....1867
Breslin, William Irwin, Asst. Surgeon, 46th Regiment of Line, 1847
Brigham. Josiah S.....1848
Brissett, Henry R.....1871
Bristol, Ames S.....1850
Brodeur, Alphonse.....1863
Brooks, Samuel T.....1851
Brouse, William H.....1847
Brossard, J. B. J.....1875
Brown, Peter E.....1863
Brown, Harry.....1873
Browne, Arthur A., B. A.....1872
Browse, Jacob E.....1861
Bruneau, Adolphe.....1853
* Bruneau, Oliver T.....[Hon].....1843
Bruneau, Onesimo.....1851
Bryson, William G.....1867
Bucke, Richard Maurice.....1862
Bucke, Edward H.....1852
Buckle, John M. C.....1869
Buckley, William P.....1870
Bull, George Joseph.....1869
Bullen, Charles F.....1864
Burgess, John A.....1868
Burch, Benjamin T.....1865
Burland, John H.....1863
Burland, William B.....1872
Burland, William H.....1875
Burrows, Philip.....1866
Burnham, Robert Wilkins.....1860
Burns, Alfred J.....1854
Burritt, Horatio C.....1863
Butler, George C.....1865
* Buxton, John N.....1849
Cameron, James C.....1874
Campbell, Donald Peter.....1862
Campbell, Francis Wayland.....1860
Campbell, G. W., M.A....[ad eun]..1843
Campbell, Samuel.....1866
Campbell, John.....1869
Carmichael, Duncan A.....1873
Carey, Augur D L.....[ad eun]..1864
Cassidy, David M.....1867
Cassidy, John F.....1865
Carroll, Robert W. W.....1859
Carson, Augustus.....1813
Carter, Samuel A.....1859
Casgrain, Charles E.....1851
Cattanach, Andrew J.....1871
Chagnon, Vinceslaus G B.....1861
* Challinor, Francis.....1849
Cherry, William.....1869
* Chesley, George Ashbold.....1862
Chevalier, Gustave.....1860
Chevalier, Napoleon E.....1873
Chipman, Clarence J. H., B.A.....1868
Chfistie, George H.....1874
Christie, John B.....1865
Christie, Thomas.....1848
Christie, John H.....1875

* Church, Charles Howard.....1862
Church, Clarence R.....1867
Church, Collier M.....1855
Church, Levi R.....1857
Church, Mills Kemble.....1864
Church, Peter H.....1846
Clark, Octavius H. E.....1870
Clark, Wallace, B. A.....1871
Clark, Richard A.....1870
Clemesha, John Wordsworth.....1867
Clement, Victor A.....1869
† Cline, John D., B. A.....1874
Cluness, Daniel.....1870
Codd, Alfred.....1865
Collins, Charles W.....1869
Comeau, John B.....1870
Cooke, Charles H.....1866
Cooke, Herman L.....1867
Cooke, Sidney P.....1869
Copeland, Wm. L.....1872
Corbett, Augustus M.....1854
Corbett, William H.....1854
Corlis, Josiah.....1869
Carson, John.....1866
* Cowley, Thomas McJ.....1870
Cox, Frank.....1869
Craik, Robert.....1854
Cram, Daniel C.....1872
* Crawford, James.....[ad eun]..1854
Crichton, Stuart.....1865
* Culver Joseph R.....1848
* Cunynghame, W. C. Thurlow.....1858
Cutter, Frederick A.....1873
Daly, Guy D. F.....1868
Dansereau, Charles.....1842
Dansereau, Charles.....1869
Dansereau, Pierre.....1855
D' Avignon, Fred F.....1871
* Dease, Peter Warren.....1847
DeBonald, W. S.....1862
DeBoucherville, Charles B.....1843
DeGrosbois, T. B.....1868
Demorest, Durham G. G.....1852
Desaulniers, Antoine A.....1863
DeCelles, Charles D.....1841
Dupuis, Joseph G. P.....1856
Dice, George.....1864
* Dick James R.....1842
Dickinson, James J.....1846
* Dickinson, George.....1867
Dickson, William W.....1863
Digby, James Winnit.....1866
Dodd, John.....1843
Donnelly, Charles H.....1866
* Dorion, Severe.....1843
* Dorland, Enoch P.....1850
Dorland, James.....1875
Dougan, William.....1867
Douglass, James.....[Hon].....1847
Drake, Joseph M.....1861
Dubuc, Charlemagne.....1864
* Duckett, Stephen.....1853
Dowling, John F.....1875
Duckett, William A.....1859
Dufort, Thadee A.....1865
Duhamel, Louis.....1860
Duncan, George.....1866
Duncan, Gideon M.....1871
Duncan, George C.....1875
Duncan, James S.....1858
* Duncan, John.....1871
* Dunn, William Oscar.....1843
Dunsmore, John M.....1870
Easton, John.....1852
Edwards, Eliphalet G.....1855
Edwards, Oliver C.....1873
Elkinton, Arthur G., Asst. Surgeon. Scots Fusileer Guards.....1862
Ellison, Saram R.....1873
Emery, Gordon J.....1857
Emery, Allard.....1866
English, T. F.....1858
Erskine, John.....1860
Ethier, Calixte.....1867
Evans, Griffith.....1864
Ewing, William.....1874
Falkner, Alexander.....1866
Falls, Samuel K.....1875
Farewell, G. McGill.....1872
Farewell, W. G.....1868
Farley, John J.....1873
Faulkner, George W.....1871
Fenwick, George Edgeworth.....1847
Fergusson, Alexander A.....1864
Fergusson, Alex. A.....1866
Finlayson, John.....1834
Finnie, John T.....1869
* Fisher, John.....1848
Fitzgerald, James.....1865
Fortin, Pierre.....1845
Fortune, Lewis M.....1873
* Foster, Stephen Sewell.....1846
Fraleigh, William S.....1869
* Fraser, William.....1836
Fraser, William H.....1867
Fraser, Donald M.....1869
Fraser, Donald.....1868
Freeman, Charles M.....1871
Fuller, W.....1866
Fuller, Horace L.....1870
Fulton, James H.....1863
Garvey, Joseph.....1852
Gardner, Matthew.....1871
Gardner, William.....1867
Gascoyne, George E., Staff Asst. Surgeon.....1861
Gauvreau, Edwin A.....1873
Gauvreau, Elzear.....1855
Gauvreau, Lewis H.....1836
Gendron, Thomas.....1866
Gerrish, George W.....1872
Gibb, George D.....1846
Gibson, John B.....1855
* Gibson, Edward B.....1864
Gillies, John.....1867
Gilbert, Henry L.....1875

Gilmour, Angus 1868
* Giroux, Philippe 1859
Girdwood, Gilbert P 1865
Glenn, C. W. E 1858
Godfrey, Robert 1845
Godfrey, Abraham C 1865
Goodhue, P. J 1875
Goforth, Franklin 1863
Gordon, Robert 1868
Gordon, William Wallace 1863
Graham, Charles E 1866
Graham, Henry 1863
Graham, Kennoth D 1875
Grant, Donald J 1863
Grant, James A 1854
Grant, William 1867
Grenier, L. P. A 1863
Guest, Thomas A 1873
Gunn, James 1861
Gustin, William Claud 1863
Hagarty, Dan. M. J 1868
* Hall, Archibald ..... (ad eun) 1843
Hall, James B 1866
Hall, J. W 1848
Halliday, James T 1866
Hamilton, Andrew W 1859
Hamilton, Charles S 1868
Hamilton, John R 1871
Hamilton, Rufus Edward 1861
Hamel, Joseph Alexander 1856
Hammond, James H 1869
Hanover, William 1875
Harding, F. W 1868
Harkin, Henry 1867
Harkin, William 1858
Harkness, John 1862
Harkness, Andrew 1869
Hanington, E. B. C 1875
Harrison, David Howard 1864
Hart, Frederick W 1835
Harvey, Wm. A 1874
Hays, James 1866
Hebert, P Zotique, ... 1872
† Henderson, Alexander A 1870
* Henderson, Peter 1843
* Henry, Walter ..... (Hon) .. 1853
* Henry, Walter J 1856
Hervey, Jones J. G 1856
Hethrington, Harry 1872
Hickey, Charles E 1866
Hickey, Samuel A., B.A 1874
Hils, Joseph 1873
Hingston, W. H 1851
Hockridge, Thos G 1874
Holden, Rufus 1844
Hollwell, John 1868
* Holmes, Andrew F ..... (ad eun) .. 1843
Howard, James 1867
Howard, Robert 1872
Howard, R. Palmer 1848
Howden, Robert 1857
Howitt, William H 1870
Howland, Francis D 1867
Hulbert, Edward Augustus 1869
Hulbert, George W 1859
Hume, William L 1875
Hunt, J. H., L. R. C. S. I 1860
Hunt, Lewis G 1871
† Hurd, Edward P 1865
Hurlburt, Richard F 1873
Irvine, James C 1866
Ives, Eli 1863
* Jackson, A. Thomas, Staff Surgeon in the Army 1846
Jackson, Wm .Fred 1874
Jamieson, Thomas A 1875
Johnston, J. C., Asst. Surg. R. A ... 1867
Johnston, Thomas G 1871
Jones, Charles R 1874
Jones, George N 1874
* Jones, Thomas W ... [ad eun] 1854
* Jones, Jonathan C 1865
Jones, Wm. Justus 1856
Jones, H. J. Montgomery 1873
Kearney, Wm. J 1875
Keefer, William N., B. A 1869
* Keeler, Thomas 1859
† Kelly, Clinton Wayne 1867
* Kelly, Wm. Surg'n Royl. Artl ... 1846
† Kelly, Thomas 1873
Kemp, William 1864
Kennedy, Richard A 1864
* Kerr, James 1858
Killery, St. John, Staff Assistant Surgeon 1862
King, Wm, M. H 1859
King, Reginald A. D 1868
King, Richard A 1867
* Kirkpatrick, A 1856
Kittson, John G 1869
Kittson, Edmund G 1873
Knowles, James A 1866
Kollmyer, Alex H 1856
Laberge, Ed 1856
* Lang, Thos. D 1869
Langlois, O. X 1875
Langrell, Richard T 1865
Larocque, A. B 1847
Law, D. W. C 1868
Lawrence, Henry G. H., Asst. Surg., Grenadier Guards 1862
Leavitt, Julius 1866
Leclair, George 1851
Leclair, Napoleon 1861
Lee, James C 1856
* Lee, John Rolph 1848
Legault, Daniel 1868
Lemoine, Charles 1850
Lepailleur, Leonard 1848
Leprohon, John L 1843
Lindsay, Heriot 1861
Lister, James 1862
Locke, C. T. A 1872
Logan, David D 1842
Logie, William 1833
* Long, Alexander 1844

Longley, Edmund.....1866
Longpre, Pierre F.....1848
Loupret, Andre.....1850
Loux, William.....1870
Loverin, Nelson.....1855
Lovett, William.....1870
† Lucus, T. D'Arcy.....1869
Lundy, Edward Lewis, Staff Asst,. Surgeon.....1862
Lyon, Arthur.....1861
McArthur, Robert R.....1867
McBain, John.....1874
McCallum Duncan C.....1850
McCarthy, William.....1867
McConkey, T. C.....1872
McConnell, John B.....1873
* McCord, John D.....1864
McCormick, Andrew G.....1874
McCrimmon, Donald A.....1869
* McCulloch, Michael.....(Hon)...1843
McCurdy, John,.....1866
McDermid, Wm.....1875
* MacDiarmid, John Duncan, Staff Surgeon in the Army.....1847
McDiarmid, Donald.....1867
McDiarmid, James.....1873
MacDonald, Angus.....1863
* MacDonald, Colin.....1853
MacDonald, Roderick.....1834
MacDonald, Roderick A.....1874
McDonald, Jos. D. A.....1873
McDonell, Alex. R.....1874
McDonell, Angus.....1852
McDonell, Æneas.....1849
McDougall, Peter A.....1847
McDougall, Peter A.....1864
McEwen, Findlay.....1870
MacFarlane, William.....1869
Macfie, James.....1869
MacIntosh, Robert.....1863
Mack, Francis Lewis.....1862
Mackie, John R.....1865
* Macklem, Samuel S.....1859
* Macnabb, Francis A. L.....1870
Madill, John.....1867
Major, George W., B. A.....1871
Malcolm, John Rolph.....1861
* Malhoit, Alfred.....1846
Malloch, Edward C.....1863
Malloch, William B.....1867
Mallory, Albert E.....1872
Marceau, Louis T.....1872
Markell, Richard.....1867
* Marr, Israel P.....1849
Marr, Walker H.....1859
Marston, Alonzo W.....1871
Marston, John J.....1863
Mason, James Lindsey, M. A.....1863
Mattice. Rich. J.....1875
† Matheson. John H.....1871
Matheson, Niel.....1870
Mayrand, William.....1847
McGarry, James.....1858
McGeachy, William.....1867
McGill, William.....1848
McGillivray, Donald.....1861
McGowan, Henry W.....1867
McGrath, Thomas.....1849
McGregor, Duncan.....1861
McGguire, Bernard D.....1873
McInnes, Walter J.....1865
McIntosh, James.....1859
McIntosh, Donald J.....1870
McIntyre, Peter A.....1867
McKelcan, George Lloyd.....1860
McKay, John.....1869
McKay, Walter.....1851
McLaren, Peter.....1861
McLaren, Peter.....1869
McLaren, Peter.....1872
McLean, Alexander.....1860
McLean. Archibald.....1867
McLeod, James.....1873
McMicking. George.....1851
McMillan, Æneas J.....1874
McMillan, Louis J. A.....1860
McMillan, John.....1857
McMurray, Samuel.....1841
* McNaughton, E. P.....1849
McNeece, James.....1866
McQuillen, James.....1871
McTaggert, Alexander.....1869
McVean, John M.....1865
Meane, John, M. R. C. S. L., Staff Surgeon Major.....1869
Meek, James A.....1875
Meigs, Malcolm R.....1865
* Meredith, Thomas L. B.....1842
Mignault, Henri Adolphe.....1860
Miller, Robert.....1870
Mines, William W.....1874
Mitchell, Fred. H.....1871
Moffatt, John Edward, Staff Surg..1862
Moffatt, Walter.....1868
Molson, William A.....1874
Mondelet, Wm. H.....1868
Mongenais, Napoleon.....1865
Mount, John W.....1855
Monk, Geo. H.....1875
Moore, Chas. S.....1874
Moore, Jehiel T.....1874
Moore, Joseph.....1852
Moore, Richard.....1853
Moore, Robert C.....1869
* Morin, Josh.....[Hon].....1850
* Morrison, David R.....1869
Morrison, John, M.A.....1872
Munro, James T.....1872
Nelles, Jas. M.....1875
* Nelson, Horace.....1861
* Nelson, Wolfred.....[Hon]..1848
Nelson, Wolfred D. E.....1872
Nicol, William R.....1872
Nicoll, Charles Richard, Surgeon Major, Grenadier Guards.....1862
Nesbitt, James A.....1868

Norton, Thomas.....1874
O'Brien, Thomas B. P.....1862
O'Brien, Robert S.....1873
O'Brien, David.....1873
O'Callaghan, Cornelius H.....1854
* O'Carr, Peter.....1857
* O'Conner, Daniel A.....1861
O'Dea, James Joseph.....1859
Odell, William, Surgeon 19th Regiment of the Line.....1849
O'Leary James.....1866
O'Leary, Patrick.....1859
Oliver, James W.....1867
O'Reilly, Charles.....1867
Osler, Wm.....1872
Padfield, Charles Wm.....1868
Painchaud, Edward S. L.....1848
Palmer, Lorin L.....1867
Paquin, Jean M.....1843
Paradis, Henry.....1848
Paradis, Pierre E.....1867
Parker, Rufus S.....1866
Parker, Charles S.....1866
* Paterson, James.....1865
Paterson, James.....1864
* Pattee, George.....1858
Pattee, Richard P.....1874
Pallen, Montrose A.....1864
Patton, Edwark K.....1867
Pegg, Austin J.....1872
Pegg, Charles H.....1867
Perrault, Victor.....1852
Perrier, John.....1868
Perrigo, James M.A.....1870
Perry, Hezekiah R.....1873
Phelan, Cornelius J. R.....1865
Phelan, James S.....1874
* Phelan, Joseph P.....1854
Philip, David L.....1861
* Picault, A. C. E.....1857
Pickup, John Walworth.....1860
* Pinet Alexis.....1847
Pinet, Alex. R.....1864
Poussette, Arthur Courthope.....1860
Powell, Israel Wood.....1860
Powell, Newton W.....1853
Powers, George W.....1861
Powers, Lafontaine B.....1864
Pringle, George.....1855
Presser, Wm. O.....1874
Proudfoot, John S.....1868
Proudfoot, Alex.....1869
Proulx, Philias.....1844
Prevost, E. Gilbert.....1859
Quarry, James J.....1868
Quesnel, Jules M.....1849
Rae, John Hamilton,.....(Hon).....1853
Rainville, Pierre.....1865
Rambaut, John, Surgeon, Canadian Rifles.....1859
Rattray, Charles J.....1871
Rattray, James C.....1874
Raymond, Oliver.....1850
Read, Herbert H.....1861
Rednor, Horace P.....1864
Reddick, Robert.....1874
Reddy, John.....(ad eun).....1856
Read, Thomas D.....1871
Reid, Alex. Peter.....1858
Reid, John A.....1871
Reid, Kenneth.....1864
Reynolda, Robert T.....1836
* Reynolds, Thomas.....1842
Richard, Marcel.....1864
Richmond, Peter E.....1873
Ridley, Henry Thomas.....1852
* Riel. Etienne R. R.....1857
Rinfret, Ferdinand R.....1868
* Rintoul, David M.....1854
Richardson, John R.....1865
Ritchie, John L.....1874
* Roberts, Edward T.....1859
Roberts, John E., B.A.....1867
Robertson, James.....1865
Robertson, David.....1864
Robertson, David T.....1857
Robertson, Patrick.....1867
Robillard, Adolphe.....1860
Robinson, Wesley.....1872
Robitaille, Louis.....1860
Robitaille, L. T.....1858
† Roddick. Thomas G.....1868
Rodger, Thomas A.....1869
Rogers, Amos.....1874
Rooney, Robert F.....1870
† Ross, George, M.A.....1866
Ross, Thomas.....1863
Ross, Henry.....1872
Ross, William G.....1871
Ross, Wm. D.....1875
Rugg, Henry C.....1865
Rumsey, William.....1859
Ruttan, Allan.....1852
* Sabourin, Moise.....1849
Sampson, Jas. (Hon).....1847
Sanderson, George W.....1850
Savage, Thomas Y.....1854
Savage, Alex. C.....1866
Sawyer, James E.....1863
Schmidt, Samuel B.....1847
Schofield, David T.....1869
Scott, Stephen A.....1854
Scott, Wm. E.....1844
Scott, Wm. F.....1875
* Scrivan, George Augustus.....1846
Seagar, Francis R.....1870
Seguin, Andre.....1848
Senkler, A. E.....1863
* Sewell, Stephen C.....(ad eun)..1843
Sewell, Colin.....(ad eun).....1869
Sharpe, Wm. James.....1872
Shaver, Peter Rolph.....1854
Shaver, R. N.....1857
Shepherd, Francis J.....1873
Shoebottom, Henry.....1857
* Simard, Amable.....1852

Simpson, Thomas.....1854
Sinclair, Coll.....1874
Smallwood, John R.....1868
Smith, Daniel D.....1868
* Smith, Edward W.....1859
Smith Norman A.....1870
Smythe, T. W.....1848
Sparham, Terence.....1841
Speer, Andrew M.....1874
* Squire, William Wood, M.A.....1864
Stanton, George.....1868
Stark, George A.....1872
* Staunton, Andrew Aylmer, Surgeon Royal Artillery.....1845
Stevens, Alex. D.....1857
Stevenson, James McGregor.....1856
Stevenson, John A.....1873
* Stevenson, John L.....1855
Stevenson, Robert A.....1871
Stewart, Alexander.....1872
Stewart, John Alexander.....1862
Stewart, James.....1869
Stephenson, James.....1859
Stimpson, Alfred O.....1868
Shirk, George.....1865
St. John, Leonard.....1871
Stowbridge, James Gordon.....1862
Sutherland, Fred. Dunbar.....1861
Sutherland, Walter.....1874
* Sutherland, William.....1836
* Sutherland, William.....1870
Switzer, John E. K.....1865
Tabb, Silas E., M.A.....1869
Tait, Henry Thomas.....1860
Taylor, Wm. H.....1860
Taylor, Sullivan A.....1870
Tew, Herbert S.....1864
Temple, James A.....1865
Thayer, Linus O.....1859
Theriault, F. D.....1863
Therien, Honore.....1863
* Thomson, James.....1842
Thompson, Robert.....1852
Tracy Andrew W.....1873
Trenbolme, Edward Henry.....1862
Trudel, Eugene.....1844
Turgeon, Louis G.....1860
Tuzo, Henry A.....1853
† Tunstall, Simon J., B.A.....1875
Ussher, Henry.....1861
Vannorman, Jonathan A.....1850
Vercoe, Henry L.....1865
Vicat, John R.....1867
Wagner, A. Dixon.....1872
Wagner, William H.....1844
Wakeham, William.....1866
Wales, Benjamin N.....1874
Walker, Robert.....1851
Wallace, Izaac N.....1874
Walsh, Edmond C.....1866
Walton, George O.....1873
Wanless John R.....1867
Ward, William T.....1873
Ward, Michael O'B.....1875
Warren, Frank.....1872
* Warren, Henry.....1860
Waugh, William.....1872
Webb, James T. S.....1871
Weilbrenner, Remi Claude.....1851
Weir, Richard.....1852
* Wherry, John.....1862
Whitecomb, Josiah G.....1848
Whiteford, James W.....1873
Whitford, R.....1857
Whitwell, William P. O.....1860
Whyte, Joseph A.....1870
Wigle, Hiram.....1875
* Widmer, Christopher...(Hon).....1847
Wilcox, Marshall B.....1868
Wilson, Benjamin S.....1856
Wilson, Robert M.....1850
Wilson, William.....1857
* Wilscam, John Wilbrod.....1846
Wolverton, Algeron, B.A.....1867
Woods, David, Staff Surgeon.....1860
Wood, George C.....1849
Wood, George.....1863
Wood, Hannibal W.....1865
Woods, Jno. J. E.....1875
Woodfull, Sam. Pratt. Asst-Surgeon Royal Artillery.....1864
Woolway, C. J.....1875
Workman, Benjamin.....1853
Workman, Joseph.....1835
Worthington, Edward...[ad eun]...1868
Wright, Henry P.....1872
Wright, Stephen.....1859
Wright, William.....1848
Wye, John A.....1868
Young, Robert C.....1873
Yonker, William.....1870

* Deceased.

† Holmes Modallist.

MASTERS OF ARTS.

Allworth, Rev. John, B.A.....1875
Bancroft, Rev. Charles (ad eun)....1855
Bancroft, Rev. C., B.A...Junior.....1870
Baynes, Donald, B.A.....1867
Bethune, Meredith Blenkarne, B.A.1869
* Bothwell, John A., B.A.....1868
Bowman, Wm. M.....[Hon].....1859
Boyd, John, B.A.....1864
Browne, Dunbar, B.A., B.C.L.....1861
Butler, Rev. John.....(Hon).....1852
Cameron, James, B.A.....1874
Carmichael, Rev. J., B.A.....1871
Chamberlin, Browne, D.C.L. (ad eun).....1857
Chapman, Rev. Charles, M.A., London Univ., (ad eun).....1872
Clarke, Wallace, B.A., M.D.....1872
Clowe, James D., B.A.....1874
Cornish, Rev. George, B.A.....1860
Crothers, Rev. William J., B.A.....1875
Cushing, Lemuel, B.A., B.C.L.....1867
Dart, William J., B.A.....1874
Davidson, Rev. James, B.A.....1866
Davidson, Charles P., B.A., B.C.L.1867
Davidson, Leonidas H., B.A.....1867
Dey, William J., B.A.....1875
DeWitt, Caleb S., B.A.....1864
Dougall, John R., B.A.....1867
Duff, Archibald, B.A.....1867
Duncan, Alexander, B.A.....1875
Ells, Robert, B.A.....1875
Gibb, George D., M.D...(Hon).....1856
Gibson, Thomas A.....(Hon).....1856
Gilman, Francis E., B.A.....1865
Gould Edwin, B.A.....1860
Graham, John H.....(Hon).....1859
Green, Joseph, B.A.....1864
Hall, Rev. Wm., B.A.....1867
Hart, Lewis A., B.A.....1869
Hicks, Francis W., B.A.....1870
Hindley, John, B.A.....1873
Howe, Henry Aspinwall...(Hon)....1855
Jones, Montgomery, B.A.....1873
Kahler, Frederick A., B.A.....1872
Kemp, Rev. Alexander F...(Hon)..1863
Kennedy, George T., B.A.....1872
Kennedy, Rev. John, B.A.....1860
Kirby, James, B.A., B.C.L.....1862
Krans, Rev. Edward H., B.A.....1875
* Leach, Robert A., B.A., B.C.L...1860
McCord, David R., B.A., B.C.L.....1867
McGregor, Duncan, B.A.....1874
McGregor, James, B.A.....1868
McIntosh, John, B.A.....1873
McLaren, John R., B.A.....1868
McLennan, Duncan H., B.A.....1875
Markgraf, Charles, F. A...(Hon)...1865
Mason, James L., B.A.....1863
Mattice, Corydon J., B.A.....1862
Morris, Alex., B.A., B.C.L.....1852
Morrison, Rev. James D., B.A.....1868
Morrison John, B.A.....1870
Munroe, Gustavus, B.A.....1874
Perkins, John A., B.A.....1862
Perrigo, James, B.A.....1869
* Plimsoll, Reginald J., B.A.....1862
Ramsay, Robt. A., B.A., B.C.L.....1867
Robins, Sampson Paul, B.A.....1868
* Rodger, David.....(Hon).....1857
Ross, George, B.A., M.D.....1866
* Stewart, Rev. Colin Campbell, B.A.1870
Tabb, Silas Everett, B.A.....1869
Thorburn, John.....(Hon).....1861
Trenholme, Norman W., B.A., B.C.L1867
Torrance, Edward F., B.A.....1874
Wallace, Rev. R. W., B.A.....1875
Wicksteed, Richd. G., B.A., B.C.L.1866
Wilkie, Daniel.....(Hon).....1866
Wilson, John, B.A.....1870
Wortherspoon, Ivan Tolkien, B.A..1869

* Deceased.

BACHELORS OF CIVIL LAW.

* Abbott, Christopher C.....1850
Abbott, John J. C.....1854
Abbott, John, B.....1874
Adams, Abel.....1867
Allan, Irvine.....1862
‡ Archibald, John Sprott, B.A.....1870
Archambault, Henri.....1874
Archambault, Joseph L. C.....1871
Armstrong, Louis.....1861
Ascher, Isidore G.....1863
Aylen, John M.D.....1861
Aylen, Peter B.A.....1854
* Badgley, Frank H.....1852
Bagg, Robert Stanley.....1871
Barnston, John G.....1856
Barry, Denis.....1872
Baynes, Edward Alfred.....1867
Baynes, O'Hara.....1874
Bonjamin, Lewis N.....1865
‡ Bethune, Meredith, B., M.A.....1869
Branchaud, Athanase.....1862
* ‡ Bothwell, John A., B.A.....1866
Bouthillier, Charles F.....1867
Boyd, John, B.A.....1864
Bowie, Duncan E.....1873
Browne, Dunbar, M.A.....1858
Bullock, Wm. E., B.A.....1863
Butler, Thomas L.....1865
Calder, John.....1871
Carden, Henry.....1860
Caron, Adolph P.....1865
Carter, Christopher B.....1866
Carter, Edward.....1864
Chamberlin, Brown.....1850

Chamberlin, John, Junr.....1867
Chambers, A. Busteed.....1875
Charland, Alfred.....1863
Chauveau, Alexandre.....1867
Chauret, Amedee.....1873
Choquette, Francis X.....1874
Cocquet, Ambroise.....1865
Couillard, Edward.....1875
Coutlee, Lewis W. P.....1873
Conroy, Robert Hughes.....1869
Cowan, Robert C.....1862
Cruikshank, William.....1872
Curran, Joseph C.....1862
Cushing, Charles.....1869
Cushing, Lemuel, Junr., M.A.....1865
Daly, J. G.....1858
Dansereau, Arthur.....1865
Darby, Daniel.....1870
Darcy, Pierre J., M.A.....1868
David, Alphonse.....1872
Davidson, Charles P., M.A.....1863
Davidson, Leonidas Heber, M.A.....1863
Day, Edmund T.....1864
Desaulniers, Henri Lesieur.....1864
Des Rivieres, Rodolphe.....1875
Des Rosiores, Joseph.....1873
Desrochers, Jean L. B.....1861
Doak, George O.....1863
Doherty, Thos. J.....1868
Dorion, Adelard A. P.....1862
Doutre, Pierre.....1858
Doutre, Gonzalve.....186
Driscoll, Notterville H.....1861
Drummond, William D.....1867
Dubuc, Joseph.....1869
Duchesnay, Henri J. T.....1866
Dunlop, John.....1860
Duprat, Pierre N.....1866
Durand, Naphtalie.....1864
Farmer, Wm. O.....1866
Fisher, Roswell C.....1869
Fisk, John J.....1868
Foran, Thomas P.....1870
Franks, Albert W.....1871
Gairdiner, William F.....1856
Galarneau, Joseph Antoine.....1864
Galbraith, William.....1875
Gauthier, Zéphirin.....1859
Geoffrion, Christopher A.....1866
Gibb, James R.....1868
Gilman, Francis E., M.A.....1865
Girouard, Désiré.....1860
‡ Gordon, Asa.....1867
Grenier, Amedé L. W.....1863
Hackett, Michael F.....1874
Hall, John S., B.A.....1875
Hall, William A.....1863
Harnet, Wm. de Courcy.....1870
Hart, Lewis A., M.A.....1869
Hemming, Edward J.....1855
‡ Hodge, David W. R., B.A.....1874
Holton, Edward.....1865
Houghton, John G. K.....1863
Howard, Rice M.....1869
Howliston, Alexander.....1865
Huntingdon, Russ Wood.....1875
‡ Hutchinson, Matthew.....1873
Jenkins, George E.....1874
Jodoin, Isaie.....1858
Johnston, Edwin R.....1856
Jones, Richard A. A.....1854
Joseph, Joseph O.....1864
Keller, Francis J.....1869
Kelley, John P.....1862
Kemp, Edson, B. A.....1860
Kenny, William R.....1865
Kirby, James, M.A.....1862
Kitson, George, R. W.....1867
Labadie, M. T. Adolphe.....1874
Labadie, Y. Odilon.....1874
Lacoste, Arthur.....1869
Laflamme, R. G.....1856
Laflamme, Leopold.....1869
Lafrenaye, P. R.....1856
Lambe, William B.....1850
Lanctot, Mederic.....1860
Lariviere, Joseph.....1871
Larose, Telesphore.....1860
Laurier, Wilfred.....1861
Lay, Warren Amos.....1867
Lawlor, Richard S.....1865
Leach, David S.....1861
* Leach, Robert A., M. A.....1860
Le Beauf, Louis C.....1873
Lefebvre, Frederick.....1863
Lonergan, James.....1873
Lonergan, Michael L. S.....1871
Loranger, Louis George.....1869
Lyman, Elisha Stiles.....1865
Lyman, Frederick S., B.A.....1869
‡ Lynch, Wm. W.....1868
MacKenzie, Frederick.....1861
‡ Major, David.....1875
Major, Edward James.....1871
‡ Marler, William DeM., B.A.....1872
McCord, David Ross, M.A.....1867
McCormack, David.....187[illegible]
McDonald, Frank H.....[illegible]
* McGee, Thomas D'Arey.....1863
McIntosh, John, B.A.....1873
McLaren, John J.....1871
McLaren, John R[illegible].....1860
McLaurin, John (P I).....1872
‡ McMaster, D (C C I).....1874
Merry, John [illegible] (C I).....1866
Messier, D[illegible]rt.....1872
Messier, [illegible]chard G., (C I).....1863
Mitchell[illegible]n, (C I).....1866
Molson[illegible]ac O.....1869
Monk [illegible]omas F.....1869
Morri[illegible]oon, Ivan T., (Morrin) [illegible]
Morri[illegible] I).....1866
Nagl[illegible] William McKay.....1861
Nich
Nut
Quir

Panet, Edouard A.....1871
Papineau, Joseph G.....1869
Piche Aristide 1868
Perry, Joseph.....1869
Pariseault, Chas. Ambroise.....1859
Perkins, John A., M.A.....1865
* Plimsoll, Reginald J., M.A.....1861
Poutre, Felix E.....1871
Power, Alexander W. A.....1868
Prefontaine, Raymond.....1873
Rainville, Henri Benjamin.....1873
Ramsay, Robert A., M.A.....1866
Richard, Damase F. S.....1859
Richard, Emery Edward.....1867
Richard, Edward E.....1868
Rixford, Emmet Hawkins.....1865
Robillard, Emilie.....1871
Robideaux, Emery.....1866
Rochon, Charles A.....1861
Rose, William.....1866
Sabourin, Ernest.....1863
Santoire, Camille.....1873
Sarrasin, Ferdinand Leon.....1871
Sexton, James Ponsonby.....1860
Short, Robert.....1867
Sicotte, Victor B.....1862
Snowdon, H. L.....1856
Spong, John J. R.....1871
Stephens, Charles Henry.....1875
Stephens, George W.....1863
Stephens, Romeo H.....1850
Stephens, Chas. O.....1864
Tait, Melbourne.....1862
Taschereau, Arthur.....1864
Taylor, Reid.....1869
Territ, Joseph Lee.....1865
Torrance, Fred. W., M.A.....1856
Trenholme, Edward H., M.D.....1865
‡ Trenholme, Norman W., M.A.....1865
Vandall, Phillipe.....1865
Vilbon, Chas. A.....1863
Walker William G.....1874
Walsh, Thomas Joseph.....1863
Watts, William J., B.A.....1869
Welch, Alfred.....1864
Wicksteed, Richard G., M.A.....1864
Wight, James H.....1868
Wood, Franc Ogilvie.....1870
Wotherspoon, Ivan T. (Laval). [ad eun].....1869
Wright, William Mackay, B.A.....1863
Wurtele, Charles J. C.....1863
Wurtele, Jonathan S, C.....1870

* Deceased. ‡ Elizabeth Torrance Medallist.

BACHELORS OF ARTS.

Allan, James G [Sel].....1873
Allan, John [nl].....1874
Allworth, John.....1872
Anderson, Jacob de Wit, [Cel].....1866
Archibald, John Sprott, (Wp).....1867
Aylen, Peter.....1850
Bancroft, Rev. Chas., Junior.....1866
Barnston, Alexander (C).....1857
Baynes, Donald.....1864
Beckett, William Henry.....1866
Bethune, Meredith Blenkarne (Lnl).....1866
James R.....1874
Alex. D., (nl).....1870
E.....1852
* Abbott, Christophé (Lnl).....1864
Abbott, John J. C.....1861
Abbott, John, B.....1865
Adams, Abel.....(Sel).....1868
Allan, Irvine.....1866
‡ Archibald, John Sprott, B.A.....1853
Archambault, Henri.....1856
Archambault, Joseph L. C.....1860
Armstrong, Louis.....1871
Ascher, Isidore G.....1867
Aylen, John M.D.....1873
Aylen, Peter B.A.....1866
* Badgley, Frank H.....1875
Bagg, Robert Stanley.....1866
Barnston, John G.....1872
Barry, Denis.....1869
Baynes, Edward Alfred.....1871
Cook, Archibald H., (Morrin).....1869
Clowe, John D.....1863
Cornish, Rev. Geo., B.A., *London Univ.* (ad eun).....1856
Craig James.....1874
Crothers, W. J., (p).....1872
Coussirat, Rev. Adrian D., (ad eun).1871
Cushing, Lemuel, (cl).....1863
Dart, William J.....1868
Davidson, Charles Peers.....1863
Davidson, Rev. Jas. (ad eun).....1863
Davidson, Leonidas Heber.....1863
Dawson, William B., (Lnl).....1874
Dewey, Finlay McN. (m).....1874
Dey, William J., (Lnl).....1871
DeWit, Caleb S.....1861
Dougall, Duncan.....1860
Dougall, John Redpath.....1860
Drummond, Chas. G. B. (nl).....1862
Duff, Archibald (Mnl).....1864
Duncan, Alexander.....1867
Ells, Robert, (Lnl).....1872
Empson, John.....1874
Fairbairn, Thomas (p).....1863
Ferguson, John S.....1861
* Ferrier, Robert W.....1857
Fessenden, Elisha Joseph.....1863
Fleet Charles J., (cl).....1873
Fortin, Rev. Octave (ad eun).....1867
Fowler, William (nl).....1865
Fowler, Elbert.....1868
Fraser, John (Morrin).....1869

Gibb, Charles.....1865
Gilman, Francis Edward 1862
Gore, Frederick.....1861
Geuld, Edwin.....1856
Grandy John.....1866
Greenshields, Edward (W P I).....1869
Greenshields, Samuel.....1874
Green, Joseph (C e I).....1861
Green, Lonsdale.....1864
Hall, John S.....1874
Hall, William.....1861
Hart, Lewis A.....1866
Harrington, Bernard J., (L n I)...1869
Harvey, Alfred.....1874
Harvey, Charles J.....1874
Hicks, Francis W.....1864
Hindley, John.....1868
Hodge, D. W. K., (S e I) 1872
Holiday, Caleb S.....1870
Jones, Montgomery, (e I).....1869
Johnston, James A., (W p I).....1870
Joseph Montefiore (n I).....1870
Kahler, Frederick A., (C e I).....1869
Kelley, Frederick W., (S e I).....1871
Kemp, Edson.....1859
Kennedy, George T., (n I).....1868
* Kershaw, Philip G 1867
Kirby, James (C).....1859
Kraus, Edward H., (S e I) ..1865
Laing, Robert (W p I).....1868
* Leach, Robert A.....1857
Lewis, Albert R., (e I).....1869
Lyman, Frederick Stiles.....1863
Major, George W.....1870
Marler, Wm., De M. (M m I).....1868
Mason, James L.....1859
Mattice, Corydon J.....1859
Maxwell, John, (n I).....1872
McCord, David Ross.....1863
MacDonnell, Richard L. (C e I).....1873
MacDuff, Alexander Ramsay.....1866
McFee, Kutusoff N., (W p I).....1874
McGregor, James, (e I).....1864
McGregor, Duncan.....1871
McIntosh, John (S e I).....1870
McKenzie, John (Morrin).....1867
McKenzie, Robt., (p I).....1869
McKibbin, William M.....1875
McLaren, John R.....1856
McLaren, Harry, (C) 1858
Mc can, Neil W., (Morrin).....1866
McLennan, Duncan H.....1871
McLennan, John S., (n I).....1874
McLeod, Duncan C., (M m I).....1873
McLeod, Hugh.....1866
McLeod, Finley C.....1872
McOuat, Walter (n I).....1865
Merritt, David Prescott.....1863
Moore, Francis X.....1868
Morris, William.....1859
Morris, Alexander.....1849
Morrison, John.....1866
Morrison, James D., (L n I).....1865
Morrison, David E., (e I).....1870
Muir John N.....1864
* Muir, Rev. E. P., (ad eun).....1865
Munro, Gustavus.....1871
Munro, Murdoch.....1872
Murray, Charles H. (L n I).....1873
Naylor, W. H., (W p I).....1872
Oliver, Theophilus H. (Morrin) (p)1866
Pease, George H., (W e I).....1864
Perrigo, James (n I).....1866
Perkins, John A.....1858
Petit, Rev. Charles B.....1850
Phillips, Charles W.....1852
* Plimsoll, Reginald J.....1858
Ramsay, R. Anstruther (W n I)....1862
Redpath, Geo. D.....1857
Reddy, Herbert L. (e I).....1873
Ritchie, Arthur F. (e I).....1873
Ritchie, William F. (C e I).....1875
Robertson, Alex. (L n I).....1870
Robins, Sampson Paul (W m I).....1863
Ross, George, (C e I) 1862
Russell, Henry (Morrin).....1869
Scott, Henry C. (Morrin) (p I).....1866
Sherrill, Alvan F. (C n I).....1864
Slack, George.....1868
Stethem, George T.....1852
Stevenson, Samuel C.....1874
* Stewart, Colin Campbell (L n I).1867
Stuart, Gustavus S. (W p I).....1875
Tabb, Silas Everett (n I).....1866
Taylor, Archibald D. (e I).....1874
Taylor, Ernest M.....1875
Thomas, Henry W. (S e I).....1874
Thornton, Rev. R., M.A., (ad eun).1871
Torrance, Edward F., (p).....1871
Torrance, John Fraser.....1872
Trenholme, Norman Wm., (C p I)..1863
Tunstall, Simon J., (e I).....1873
Tupper, James S., (n I).....1871
Walker, Thomas.....1860
Wallace, Robt. W., (p I).....1872
Ward, George B., (C e I).....1874
Watts, Wm. John, (e I).....1866
Whillans, Robert.....1872
Wicksteed, Richard G., (e I).....1863
Wilson, John, (e I).....1866
Wood, Franc O.....1869
Wood, Thomas F.....1869
Wotherspoon, Ivan T., (Morrin) (p I).....1866
Wright, William McKay.....1861

BACHELORS OF APPLIED SCIENCE.

In Civil and Mechanical Engineering.

Boswell, St. George J.....1871
Brodie, Robert J.....1873
Batcheller, Alvan A.....1875
Dawson, William B., B.A.....1875
Frothingham, John J.....1875
Harvey, Charles J.....1874
Hill, Arthur E.....1875
Kennedy, George T., M.A.....1873
McLean, Alexander J.....1874
McLeod, Clement H.....1873
Page, John.....1875
Robertson, George S.....1874
Ross, George.....1875
Stewart, Donald A.....1873
Wicksteed, Henry K.....1873
Wilson, Robert A.....1875

In Mining and Assaying..

Spencer, Joseph Wm. [ml].....1874
Torrance, John Fraser [ml].....1873
Wicksteed, Henry K.....1874
Wilkins, Dan. F.H. B.A. (Tor)[ml]1875

GRADUATES IN CIVIL ENGINEERING.

Barnston, Alexander, B.A.....1859
Bell, Robert, [ml].....1861
Crawford, Robert.....1859
Doupe, Joseph.....1861
Edwards, George.....1863
Frost, George H.....1860
Gaviller, Maurice.....1863
Gooding, Oliver.....1858
Gould, James H.....1862
Kirby, Charles A.....1860
McLennan, Christopher.....1859
Reid, John Lestock.....1863
Rixford, Julian Pickering.....1861
Ross, Arthur.....1860
Savage Joseph.....1860
Walker, Thomas, B.A.....1860

[c] Chapman Medallist.
[W] Prince of Wales Medallist.
[M] Ann Molson Medallist.
[S] Shakespeare Medallist.
[L] Logan Medallist.
[pl] First Rank Honours in Mental and Moral Philosophy [p] Second Rank.
[ml] " " " in Mathematics; [m] Second Rank.
[cl] " " " in Classics; (c) Second Rank.
(nl) " " " in Natural Science; (n) Second Rank.
(el) " " " in English Literature; (e) Second Rank.

* Deceased.

LIST OF THE PRINCIPAL DONATIONS

TO THE

LIBRARY AND COLLECTIONS OF THE FACULTY OF ARTS,

FROM MAY, 1874, TO APRIL, 1875, INCLUSIVE.

I.—TO THE LIBRARY.

Royal Society of London	Philosophical Transactions, Parts I and 2, of vol. 163, 2 vols. 4to. pap.
do do	List of Fellows of the Royal Society, 30th Nov., 1873, pam. 4to.
do do	Proceedings, Nos. 146-150, 5 pam. 8 vo.
do do	Klein's Anatomy of the Lymphatic System, 8 vo.
A. Sandham, Esq	McGill College and its Medals, 8 vo.
J. Harris, Esq	Centrifugal Force and Gravitation, 9 vols., 8 vo.
do do	The circle and straight line, 3 parts with plates, 8 vo.
do do	Theology and the Science of Government, with Supplement, 2 vols., 8 vo.
do do	The Science of Ideal Theology, as taught by the Bible, 8 vo.
do do	Appendix to Part II. of Supplement D. to Centrifugal Force, pam. 8 vo.
do do	Notes in Revision and plates, 2 pam. 8vo.
W. H. Thompson, Esq	Flinder's Voyage to Terra Australis, 2 vols., 8vo.
Harvard College, Cambridge, Mass	Annual Report of the Trustees of the Museum of Comparative Zoology, for 1873, pam. 8vo.
do do	Report on the Organization and Progress of the Anderson School of Natural History at Penikese Island, pam. 8vo.
A. J. Ellis, Esq	Algebra Stratified with Geometry, pam. 8vo.
Government of the Province of Quebec	Statutes of the Province of Quebec, Session 1873-74, 8vo.
do do	Journals of the Legislative Assembly of the Province of Quebec, Session 1873-4, 8vo.
do do	General Report of the Commissioner of Agriculture, pam. 8vo.
Miss Mary Carpenter	Last Days in England of the Rajah Rammohun Roy. 8vo.
do do	Six months in India. sm. 8vo.
do do	Reformatory Schools. 8vo.
do do	Juvenile Delinquents. 8vo.
do do	The Crofton Prison System. 12mo.
do do	Morning and evening Meditations. 8vo.
do do	Young Christian's Hymn Book. 16mo.
do do	Journal of the National Indian Association for 1873. pam. 8vo.

Heirs of John Robson, Esq., M.D..... 839 vols., being the completion of the Collection of Miscellaneous Works in the "Robson Library."

McGill College Book Club..... 230 vols., comprising recent publications on historical, literary, theological, and various other subjects.

Superintendent of the U.S.Coast Survey. Report of the U.S. Coast Survey for 1870. 4to.

University of Edinburgh..... Edinburgh University Calendar for 1874-75. sm. 8vo.

Dr. Meredith, Ottawa..... Dictionnaire et Grammaire de la Langue des Cris par le Rev. Père Lacombe. 8vo. pap.

Mechanics' Institute, Montreal..... Catalogue of Library, 1871. 8vo.

Miss Turner..... Le Theatre d'Honneur et de Chevalerie.

Government of the Dominion of Canada. Sessional Papers, Nos. 1-6 to vol. VII. 6 vols. 8vo.

do do ... Statutes of Canada, 1874. 8vo.

do do ... Journals of the Senate of Canada, 1874. vol. VIII. 8vo.

do do ... Journals of the House of Commons, 1874. vol. VIII. 8vo.

do do ... Report of Progress of the Geological Survey of Canada, for 1873-74. pam. 8vo.

Sandford Fleming, Esq., C.E. ..... Report of Progress on the Exploratory Surveys made for the Canadian Pacific Railway, up to January 7, 1874. With Maps and Charts. 2 vols. 8vo.

A. R. C. Selwin, Esq., F.R.S..... Figures and Descriptions of Canadian Organic Remains. Decades 1 to 4. 4 pam. 8vo.

do do ..... Report of Progress of the Geological Survey of Canada, for 1870-71 to 1873-74. 5 pam. 8vo.

do do ..... Rapport Géologique des Operations de 1866 à 1869. 8vo. pap.

Dominion Board of Trade..... Proceedings at the Third and Fourth Annual Meetings of the Dominion Board of Trade, Jan. 7th and Feb. 7th, 1874. 2 pam. 8vo.

do do ..... Proceedings at the Semi-Annual Meeting of the Dominion Board of Trade, July, 1874. pam. 8vo.

do do ..... Proceedings at the Fifth Annual Meeting of the Dominion Board of Trade, Jan. 7th 19-22, 1875. pam. 8vo.

D.A.P. Watt, Esq..... Traité des Fougères de L'Amérique. fol.

do ..... American Naturalist. vols. 1-4, 6 and 7 (and Nos. 8 and 9 of vol. 5th). 8vo.

Institution of Civil Engineers, London, England..... Minutes of Proceedings of the Institution of C. E. vols. 37-39. 8vo.

Dr. P. P. Carpenter,..... Journal of the National Indian Association. Nos. 46, 48. 3 pam. 8vo.

do do ..... On Reformatory and Industrial Schools in India. pam. 8vo.

A. Sandham, Esq.,..... Montreal and its fortifications. 8vo.

A. R. Selwyn, Esq., F. R. S..... Palæozoic Fossils. By E. Billings, F.G.S. vol. 2nd. Part. 1st. 8vo.

G. C. Broadhead, Esq.,..... Report of the Geological Survey of Missouri, 1873-74. roy. 8vo. pap.

do do ..... Atlas accompanying Report of Missouri, Geol. Survey, 1874. Large 4to. pap.

University of Toronto,..... Examination Papers, 1874. 8vo.

Harvard University,	Harvard University Catalogue, 1873-74, and 1874-75. 2 vols. 8vo.
His Highness, the Maharajah of Travancore,	Observations of Magnetic Declination made at the Trevandrum and Agustia observatories. vol. 1st. Large 4to.
H. Corson, Esq., M.A.,	Jottings on the Text of Hamlet. pam. 8vo.
F. MacKenzie, Esq., M. P.,	Debates of the House of Commons, Canada. Nos. 9, 44.
Principal Dawson, LL.D., F.R.S	Nature and the Bible. 8vo.
Lords Commissioners of the Admiralty.	Greenwich Observations, 1872. 4to.
do do	Results of the Magnetical and Meteorological Observations at the Royal Observatory, Greenwich, 1872. 4to.
do do	Results of the Astronomical Observations made at the Royal Observatory, Greenwich, 1872. 4to. ½ bd.
do do	Cape Catalogue of 1159 Stars deduced from Observations at the Royal Observatory, Cape of Good Hope. 1856-61. 8vo.
Right Hon. The Earl of Cavan,	57 Vols. comprising works on Theological subjects.
The Government of Washington,	Astronomical and Meteorological Observations, 1872 &c., 4to.
D. A. P. Watt, Esq.	Kaulfuss Enumeratio Filicum. 8vo.
The McGill College Book Club,	226 Volumes of Modern Works on General Literature, &c.,

TO THE MUSEUM.

His Excy. Gov. Rawson, Barbadoes,	Specimens of Tertiary Fossils.
Mr. Haycock,	Specimen of Specular Iron Ore.
G. Barnston, Esq.,	200 named species of Tropical Ferns.
Mr. F. Selwyn,	Humming Bird's Nest and Eggs.
Col. Grant of Hamilton, Ont.,	Fossils from the Niagara Limestone.
Mr. J. W. Spencer, Bac. Ap. Sci	Fossils from Ontario.
Mr. Thos. Leslie,	Indian Relics, L. St. Francis.
R. McLea, Esq.,	Specimen of Granite, from Nerepis New Brunswick.
D. W. Robertson, Papete, Tahiti	500 Species of Pacific Shells.
Mr. Currie, Montreal,	Oculina, Bermuda.
Mr. E. Pelletier,	Indian Relics, Illinois.

McGill Normal School.

1875-76.

Government of the School.

Under the Regulations for the establishment of Normal Schools in the Province of Quebec, the Minister of Public Instruction is empowered to associate with himself, for the direction of one of these Schools, the Corporation of McGill University, Montreal. In accordance with this arrangement, the Provincial Protestant Normal School is affiliated with the McGill University, and the following members of the Corporation of the University constitute the Committee of the Normal School for the Session of 1875-76.

NORMAL SCHOOL COMMITTEE.

J. W. Dawson, LL. D., F. R. S., Vice Chancellor of the University. *Chairman.*

Hon. James Ferrier, Senator.
Peter Redpath, Esq., } Governors of McGill College.

Rev. George Cornish, LL.D.
Robert A. Ramsay, M.A., B. C. L, } Fellows of McGill University.

William Craig Baynes, B. A., *Secretary.*

OFFICERS OF INSTRUCTION.

William Henry Hicks, Esq.—*Principal, and Ordinary Professor of English Language and Literature.*

James McGregor, M.A.—*Ordinary Professor of Mathematics, and Instructor in Classics.*

Sampson Paul Robins, M.A—*Associate Professor of Natural History.* (*)

Pierre J. Darey M.A., B. C. L.—*Associate Professor of French.*

Mr. James Duncan.—*Instructor in Drawing.*

Mr. R. J. Fowler.— " *in Music.*

Mr. John Andrew.— " *in Elocution.*

J. Baker Edwards, Ph.D.—*Lecturer on Chemistry and Natural Philosophy.* (†)

---

* Prof. Robins will also in the next Session deliver lectures on the Art of Teaching to the Elementary Class.

† Dr. Edwards will also lecture on Agricultural Chemistry.

Announcement for Next Session.

This institution is intended to give a thorough training to teachers, especially for the Protestant population of the Province of Quebec. This end is attained by instruction and training in the Normal School itself, and by practice in the Model Schools; and the arrangements are of such a character as to afford the greatest possible facilities to Students from all parts of the Province.

The Nineteenth Session of the School will commence on the first of September, 1875, and will terminate on the first of July, 1876.

The complete course of Study extends over three years, and the Students are graded as follows:—

1. *Elementary School Class.*—Studying for the Elementary School Diploma.

2. *Model School Class.*—Studying for the Model School Diploma.

3. *Academy Class.*—Studying for the Academy Diploma.

---

1. *Conditions of Admission and obtaining Diplomas.*

Candidates for admission into the Elementary School Class, will be required to pass an examination in Reading, Writing, the Elements of Grammar, Arithmetic and Geography; and to produce the certificate and sign the application referred to in Articles 1 and 2 of the Regulations. Admission into each of the higher classes requires a knowledge of the subjects of the previous one.

Each Student must produce a certificate of good moral character from the clergyman or minister of religion under whose charge he has last been, and also testimony that he has attained the age of sixteen years. He will also be required to sign a pledge that he purposes to teach for three years in some Public School in the Province of Quebec.

There will be a Semi-sessional Examination at Christmas, which all Students are required to pass, in order to continue in the classes.

At the close of the first year of Study, students may apply for examination for diplomas giving the right to teach in Elementary Schools; and after two years' study or if found qualified at the close of the first year, they will, on examination, be entitled to diplomas as teachers of Model Schools.

Students having passed the examination in the Model School Class, or having advanced to the requisite knowledge, may go on to the Academy Class, and, on examination, may obtain the Academy Diploma.

2. *Privileges of Students.*

On complying with the above conditions, all students will be recognized as *Teachers in Training*; and as such will be entitled to free tuition with the use of text books, and to bursaries in aid of their board, not exceeding $36.00 per annum in the case of those in the two first Classes, or $80.00 in the case of those in the Academy Class, should they be successful in obtaining the diploma at the final examination. A portion of this allowance will be advanced to such students as are not resident in Montreal, on their passing the semi-sessional examination at Christmas.

Under the regulations subjoined, and with the view of extending the benefits of the school to all parts of the country, those who reside at a distance of more than ninety miles from the city of Montreal, will also be entitled to a small allowance for travelling expenses proportionate to the distance.

Students resident in Montreal may share in the bursary fund, on producing certificates from their ministers or clergymen that such aid is absolutely necessary to their continuing in attendance at the school.

In addition to religious instruction of a general Protestant character by the Professors, arrangements will be made for special religious instruction by ministers representing the several denominations with which the students may be connected.

No boarding-house is attached to the institution, but every care will be taken to insure the comfort and good conduct of the students, in private boarding-houses approved by the Principal. Board can be obtained at from $10 to $14 per month.

The Prince of Wales Medal and Prize will be given to the Student taking the highest place in the Model School Class, provided that such Student shall attain to the standard fixed by the Regulations of the Council of Public Instruction for this Medal.

The Earl of Dufferin Medal will be given to the student taking the highest place in the Classical and Mathematical subjects of the Academy class, and passing creditably in the other subjects.

The J. C. Wilson Prize of $40 and a Book, contributed by him as a former Student of the School, will be offered for competition to the candidates for the Elementary Diploma, and will be given for the highest aggregate number of marks.

All the preceding regulations and privileges apply to female as well as to male students.

Persons holding the degree of B. A. or M. A. of any University in the Province of Quebec, may receive the Academy Diploma, on passing an examination in the art of teaching, and in such other subjects necessary to the Academy Diploma, as may not have been included in their University Examinations.

---

3. *Course of Study.*

1. ELEMENTARY SCHOOL CLASS, STUDYING FOR THE ELEMENTARY SCHOOL DIPLOMA.

With the view of accommodating those who may be unable to enter at the commencement of the Session, or whose previous education may enable them to enter at a more advanced period, the course of study in this class is divided into terms, as follows :—

FIRST TERM, from September 1st to December 26.

(*Entrance examination as stated above.*)

English.—Grammar and Composition ; so far as to parse syntactically and write correctly a few short descriptive sentences. Text-Books, Bullion's Grammar and Parker's Progressive Lessons ; Reading and Spelling, Etymology, Penmanship, Elocution.

Geography.—So far as to have a good acquaintance with the Map of the world.

History.—Outline of Sacred and Ancient History.—History of Canada. Text-Books, White and Hodgins.

Arithmetic.—Simple and Compound rules, Vulgar and Decimal Fractions, and Practice, with explanation and demonstration of rules. Text-Book, Sangster's Arithmetic.

Algebra.—The Elementary rules, as in Todhunter's Algebra.

Geometry.—First Book of Euclid.

Art of Teaching.—The Physical, Mental and Moral Constitution of Children.

Physics.—The Chief Forces of Nature, Properties and states of Bodies, Solids, Liquids and Gases.

French.—Elements of Grammar, easy reading and translation. Text-Books, Student's Companion to the study of French. Darey, Lectures francaises.

Natural History.—Botany as in Gray's Text-Book.

Drawing.—Elements and simple outlines.

Music.—Vocal Music with Part Songs.

SECOND TERM. January 1st to April 1st.

(*Pupils entering at the commencement of this term, will be expected to pass a satisfactory examination in the subjects of the previous term.*)

English. Grammar and Compositon, as far as to be able to analyse simple and complex sentences, and to write correctly a short essay on a familiar subject.—Elocution continued.

Geography.—So far as a good acquaintance with the physical features and political divisions of the great continents.

History. England and France. Ancient History.

Arithmetic. Proportion, Per-centage, Exchange.

Algebra. Simple Equations of one, two and three unknown quantities.

Geometry. Second and Third Books of Euclid.

Art of Teaching. General methods of Education.

Physics. Motion. Vibration. Heat and Light.

French. Grammar continued; including Reading, Translation, Oral and Written Exercises.

Natural History, Continued.

Drawing. Landscape, etc., in pencil.

Music. Elements of Vocal Music, and Part Songs.

THIRD TERM. April 1st to July 1st.

(*Pupils entering at the commencement of this term, will be expected to pass a satisfactory examination in the subjects of the two previous terms.*)

English.—Advanced Lessons, Grammar and Composition—Elocution continued.

Geography and History.—Advanced Lessons with use of Globes, and recapitulation of previous parts of the course.

Arithmetic. Conclusion of Commercial Arithmetic and general Recapitulation.

Book-keeping. By Single Entry.

Algebra. Quadratic Equations and Recapitulation.

Geometry. Recapitulations and Deductions.

Art of Teaching. School arrangements.

Elementary Chemistry. Elements and Constituents of Soils.

French, Natural History, Drawing and Music. Continued as in the previous term.

Religious Instruction will be given throughout the Session.

2. MODEL SCHOOL CLASS, STUDYING FOR THE MODEL SCHOOL DIPLOMA.

Students entering this Class, must have passed a satisfactory examination in the subjects of the Elementary School Class. The Class will pursue its studies throughout the Session, without any definite division into terms:

English.—Principles of Grammar and Composition, Style. History of the English Language. Lectures on English Literature. Elocution.

Geography.—Mathematical, with Nautical Problems, Detailed course of Political and Physical Geography.

History.—Mediæval and Modern, with especial reference to the History of Literature, Science and Art, and Colonization and Commerce.

Education.—Advanced course of Lectures on Educational Subjects.

Mathematics.—Logarithmic, Algebraic and Geometric Arithmetic, Recapitulation of Commercial Arithmetic. Quadratic Equations continued. Ratios and Progression. Theorem of Undetermined Coefficients, Binominal and Exponential Theorems. Fifth and Sixth Books of Euclid.

Object Lessons.

Chemistry and Natural Philosophy.—Affinity, Laws of Combination, Principal groups of Salts, Electricity and Electrolysis, Mechanical Physics.

Classics. Elements of the Latin Language, as in Bryce's 1st Latin Reader.

French.—Student's Companion. Translation from French into English, and from English into French, Darcy, Lectures francaises.

Agricultural Chemistry.—Principles, and application to Canadian Agriculture.

Drawing.—Figures from the Flat and from Models. Elements of Perspective.

Music.—Instrumental Music, Part Songs, and Rudiments of Harmony.

Religious Instruction throughout the Session.

3. ACADEMY CLASS, STUDYING FOR THE ACADEMY DIPLOMA.

(Students entering this Class must have passed a satisfactory examination in the subjects of the Model School Class)

English Literature.—An advanced course.

History and Geography.

Logic and Ethics.—As in Abercrombie's Intellectual and Moral Philosophy.

Mathematics.—Trigonometry, Solid Geometry, Theory of Equations, Mechanics and Astronomy. Galbraith and Haughton.

Latin.—Sallust, Catiline; Virgil, Æneid, Book IV; Latin Prose Composition, Roman History.

Greek.—New Testament, John's Gospel; Xenophon, Anabasis B I; Grammar and History.

Botany.—As in Gray's Text-book.

French.—Conversation in French. French Literature. Poitevin's French Grammar, Racine and Molicre.

Elocution.

Drawing.

EXTRACTS FROM THE REGULATIONS.

Special Regulations for the admission of teachers in training.

Article First.—Any person desirous of being admitted as a teacher in training must apply to the Principal of the Normal School, who, on his producing an extract from the Register of Baptisms, or other evidence, showing that he is full sixteen years of age, with the certificate of character and conduct required by the 10th article of the General Rules and regulations, approved by his Excellency the Governor General in Council, on the 22nd December, 1856, shall examine the candidate.

If upon his examination it is found that the candidate can read and write sufficiently well, knows the Rudiments of Grammar in his mother tongue, Arithmetic as far as the rule of three inclusively, and has some knowledge of Geography, the Principal shall grant him a certificate.

Article Second.—The candidate having thus obtained the certificate of the Principal, shall then, (in the presence of two witnesses' who, with the Principal, shall countersign the same,) sign an application in writing for admission, containing the declaration required by the 23rd general regulation. This shall be forwarded to the Superintendent of Education, together with all the certificates and other documents required, and if the whole be found correct, the Superintendent shall cause the name of the candidate to be inscribed in the Register. and notice thereof shall be given to the Principal.

Article Third.—The teachers in training shall state the place of their residence ; and those who cannot reside with their parents, will be permitted to live in boarding-houses, but in such only as shall be specially approved of. No boarding-houses having permission to board male teachers in training will be permitted to receive female teachers in training as boarders, and *vice versa*.

Article Fourth.—Every teacher in training, on passing the examination, will be allowed a sum not exceeding £9 to assist in paying his board. (*)

Article Fifth.—Every teacher in training residing at a distance of more than ninety miles from the City of Montreal, shall be entitled to receive an allowance for travelling expenses proportionate to the distance, but not to exceed two pounds ten shillings *per annum*.

Article Sixth. The total amount of allowances paid to teachers in training under the foregoing articles shall not exceed £333. 6s 8d. currency, yearly—that being the sum granted for that object ; and when the whole of this amount is appropriated, such teachers in training as may apply for admission shall not be entitled to any portion thereof until vacancies shall occur.

---

* Except in the case of Teachers in training for the Academy Diploma, who may receive a sum not exceeding £20.

Special Regulations for Government and Discipline.

Article First.—Teachers in training guilty of drunkenness, of frequenting taverns, of entering disorderly houses or gambling houses, or keeping company with disorderly persons, or committing any act of immorality or insubordination, shall be expelled.

Article Second.—There shall be no intercourse between the male and female teachers in training while in School, or when going to, or returning from it. Teachers of one sex are strictly prohibited from visiting those of the other.

Article Third.—They are on no account to be absent from their lodgings after half-past nine o'clock in the evening.

Article Fourth.—They will be allowed to attend such lectures and public meetings only as may be considered by the Principal conducive to their moral and mental improvement.

Article Fifth.—Proprietors of boarding-houses authorized by the Principal shall report to him any infraction of the rules with which they may have become acquainted.

Article Sixth.—The Professors shall have the power of excluding from the lectures for a time, any student who may be inattentive to his studies, or guilty of any minor infractions of the regulations.

Article Seventh.—Teachers in training will be required to state with what religious denomination they are connected ; and a list of the Students connected with each denomination shall be furnished to one of the Ministers of such denomination resident in Montreal, with a request that he will meet weekly with that portion of the teachers in training, or otherwise provide for their religious instruction. Every Thursday after four o'clock will be assigned for this purpose.

Article Eighth.—In addition to punctual attendance at the weekly religious instruction, each student will be required to attend public worship at his own church, at least every Sunday.

Intending students may obtain all necessary information on application to the Principal or either of the Professors.

MODEL SCHOOL OF McGILL NORMAL SCHOOL.

Head Teacher of Boys' School—Francis W. Hicks, M. A.
" " Girls' School—Amy F. Murray.
" " Primary School—Lucy H. Derick.

These Schools can accommodate about 300 pupils, are supplied with the best furniture and apparatus, and conducted on the most modern methods of teaching. They receive pupils from the age of six and upwards, and give a thorough English Education. Fee ; Boys' and Girls' Model Schools, 1s. 3d. to 2s. per week ; Primary School, 9d. ; payable weekly.

School Examinations of the McGill University.

FOR THE CERTIFICATE OF THE UNIVERSITY AND THE TITLE OF ASSOCIATE IN ARTS.

Subjects of Examination.—1876.

1. These are divided into two Classes, (I) *Preliminary*, consisting of those in which every Candidate must pass, and (II) *Optional*, consisting of those in which the Candidate may have a choice.

2. The Preliminary subjects, with their values severally, are:—

English reading	30 *marks.*
English dictation	40 do.
English Grammar (as in Morell)	50 do.
Arithmetic (all the ordinary rules)	60 do.
Geography (acquaintance with the maps of each of the four Continents, and of British North America)	50 marks.
British History (as in Collier), and Canadian History	50 do.

The Candidates will also be examined in the Gospels, unless objection be made thereto by their parents or guardians, and creditable answering in the same will be mentioned in the Certificate.

Additional marks, not exceeding 20, may be allowed in the Dictation paper, for quality of handwriting.

No candidate can pass unless he shall have obtained at least *one third* of the total number of marks in each of the above subjects, except Reading and Dictation, in which *two thirds* will be required.

3. The Optional subjects are divided into three sections as follows:—

(1) Languages.

Latin.	
Grammar. Cæsar, B. G. Bk. I. Horace, Odes, Bk. I., Virgil, Æn., Bk. I.	150 marks.
Greek.	
Grammar. Homer, Iliad, Bk. I. Xenophon, Anabasis, Bk. I.	150 do.
French.	
Grammar. Reading and translation of a French author Translation of English into French.	100 do.

German.

Grammar.
Reading and translation of a German author..... } 100 marks.
Translation of German into English.

(2) Mathematics, Natural Philosophy, &c.

Geometry.

Euclid, I. II. III..... 150 do.

Algebra.

Elementary rules, Involution, Evolution, Fractions, Simple Equations. } 150 do.

Natural Philosophy

Mechanics and Hydrostatics. (As in Loomis)..... 100 do.

Elementary Mensuration of Surfaces and Solids,

(as in Chambers's Educational Course)..... 100 do.

Mechanical and Architectural Drawing..... 100 do.

(3) English.

The English Language;

Earl's Philology of the English Tongue, Historic Sketch and chaps V to VIII. } 100 do
Trench's Study of Words

English Literature.

Collier's Hist. of English Literature. } 100 do
Bunyan's Pilgrim's Progress

Additional Marks, not exceeding 50, may be allowed in the literature paper for quality of Composition.

History,—White's Outlines of Universal History..... 100 do.
Geography,—Physical, Political and Commercial..... 100 do.

Instead of passing in one or more subjects of the English Section, Candidates may, if they prefer it, pass in one or more of the following subjects:

(4.) *Natural Science*,

Zoology, (as in Paterson's Zoology for Schools.)..... 100 do
Botany, (as in Gray's First Lessons)..... 100 do
Geology (as in Dana's Text-Book)..... 100 marks
Chemistry (as in Wilson's School Chemistry)..... 100 do

Every Candidate must pass in at least one, and not more than three subjects in each of the Optional Sections.

Every Candidate who passes in *not less than three* of the total number of Optional Subjects, in addition to the Preliminary Subjects, will be entitled to receive the School Certificate of the University.

No Candidate will be considered as having passed in any of the above Optional Subjects, unless he has obtained *at least one-fourth* of the total number of Marks obtainable in that subject.

Any Candidate who passes in more than one subject of any section, and who in at least one of those subjects obtains *more than half* the total number of Marks, will be entitled to a Certificate of creditable answering, in that section.

The total number of Marks gained by every Candidate, including both Preliminary and Optional Subjects, shall be added up, and the Candidates arranged in a printed list, at the close of the Examination, in the order of these totals. No Marks in any subjects shall be counted unless the Candidate has gained at least the minimum number of Marks in that subject.

Candidates passing in French or other Modern Language or languages, and not in Latin or Greek, shall receive a Junior certificate, Candidates passing in Latin and Greek, or in Latin or Greek with a Modern Language, shall receive a Senior certificate.

Candidates taking Senior certificates, shall be termed Associates in Arts of the University.

Every Candidate shall present a certificate of character, and also a certificate from his parent or guardian that his age on the first day of the examination does not exceed eighteen years.

In the case of those who pass in Latin, Greek, English, Algebra and Geometry, the Examination will be received as the Matriculation Examination in the Faculty of Arts.

Candidates who fail, or who may be prevented by illness from completing their examinations, may come up at the next examination without extra fee.

The Examinations will be held in the William Molson Hall, on Thursday May 25th, and successive days, except Saturday, in the following order.

I. *Preliminary Subjects.*—(May 25th,) English; Geography; Gospels; (26th,) Arithmetic; British and Canadian History.

II. *Optional Subjects.*—(May 29th,) Latin; French; (30th,) Greek; German; (31st,) Mathematics, &c; (June 1,) English, &c; (June 2,) Natural Science.

Hours of Examinations 9 a. m. and 2 p. m.

The Examination fee ($4) must be paid by candidates to the Secretary of the University on entering their names.

SCHOOL EXAMINATIONS, 1875.

Passed as Associates in Arts.

WILLIAM D. LIGHTHALL.—*(High School.)* Latin,* Greek,* French,* Geometry,* Algebra, Mensuration, English Language and Literature,* History,* Scripture.*

W. A. FARWELL.—*(Braeside Academy.)* Latin,* French,* Geometry,* Algebra,* Natural Philosophy, English Composition,* History,* Chemistry,* Scripture.*

R. J. E. HOWARD.—*(High School.)* Latin,* Greek, French,* Geometry. Algebra, Natural Philosophy, English Composition,* English Language and Literature,* History,* Scripture.*

C. A. Molson.—*(Mr Sydenham's School.)* Latin,* French, Geometry, Algebra, English Compositon,* History, Geography,* Scripture.*

Passed for Junior Certificates.

C. F. Dawson.—*(High School.)* Latin,* Geometry,* Algebra, English Language and Literature,* Geography,* Scripture.

W. C. Norris.—*(Mr. Nichol's School.)* Latin,* French, English Composition, History, Geography,* Scripture.*

W. S. Kerry.—*(High School.)* Latin,* Geometry, Algebra, History,* Geography,* Scripture.*

F. D. Adams.—*(High School.)* Latin, Geometry, Algebra, Botany,* Chemistry,* Scripture.

---

* Creditable answering.

School Certificates of the University.

1. *Associates in Arts.*

1865

Montgomery Jones
John Ferguson
Charles Cushing
Robert H. Conroy
Samuel Stevenson
Wallace Clarke
Frederick W. Evans
Robert W. Forester
Edward B. Greenshields
Montgomerie Lewis
George Joseph Bull
Albert Murray
Daniel McLachlin

1866

Sidney Arthur Fisher
Charles E. Porteous
Will. W. Walkern
Chas. G. Stewart
Geoffrey W. Porteous
Florance David
Hew D. Whitney
George W. Torrance
Robt. M. Esdaile.

1867

Charles H. Ferry
James Rodger
Geoffrey W. Porteous
Thomas C Thomson
Francis J. Shepherd
Gerald Lloyd

1868

John Fraser Torrance
Will. Osborne M. Cross
Henry G. W. Badgley
John B. Abbott
John Gray Grant
Thomas C. Hempsted

1869

Arthur F. Ritchie
Simon J. Tunstall
Charles R. Jones
O'Hara Baynes
Aaron D. M. DeSola
Charles Jas Fleet
John Thos. Caldwell
James M. Mitchell
John Kay
James Green

1870

William Bell Dawson
Archibald D. Taylor
Hiram B. Stephens
Henry W. Thomas
Samuel Greenshields
Sheringham A. Shepherd
William McEachran
David S. Robertson

1875.

William D. Lighthall
W. A. Farwell
Robert T. B. Howard
Charles A. Molson

1875.

Charles F. Dawson
William C. Norris

2. *Junior Certificates.*

William S. Kerry
Frank D. Adams

ADDENDA.

The Earl of Dufferin's Gold and Silver Medals.

The Subject for 1876 will be "*The Fall of the Republic of Florence.*" (For Regulations and Subject for 1875, See Page 25.)

Fees for Degrees.

Every Candidate for the Degree of M.A., D.C.L., or LL.D. in course, shall be required, when sending his thesis to the Dean of Faculty, to remit at the same time the Graduation fee to the Secretary of the University; and this shall be an essential condition to the entertainment of his application.

In cases when the Degree of M.A. may be granted *in absentia*, the fee shall be twenty-five dollars instead of ten dollars as at present.

Academic Dress.

The following are the Regulations at present in force.

1. Undergraduates shall wear a plain black stuff gown, with round sleeve looped up at the elbow.

2. Bachelor of Arts:—black gown of Prince's stuff, with full sleeve looped at elbow and terminating in a point:—hood, black, lined with fur, and edged 1½ inch deep with crimson.

3. Bachelor of Applied Science:—the same gown as Bachelors of Arts:—hood, rich mauve, lined with rabbit skin.

4. Master of Arts:—black gown, as above, with long sleeve with semi-circular cut at the bottom:—hood, black silk lined with crimson, and edged 1½ inch deep with white.

5. Master of Engineering and Master of Applied Science:—same gown as Masters of Arts:—hood, rich mauve, lined with white silk.

6. Bachelor of Civil Law:—black silk gown ornamented on sleeves and front edgings:—hood, lilac silk, lined with white silk, edged 1½ inch deep with crimson.

7. Doctor of Civil Law :—for undress, the same gown as the Bachelor of Civil Law :— hood, scarlet cloth, lined with pink silk and edged 1½ inch deep with black velvet.

8. Doctor of Laws :—for undress, the same gown as the Master of Arts :—hood, scarlet cloth, lined with pink silk, and edged 1½ inch deep with white satin.

9. Doctor of Medicine :—same gown as the Doctor of Civil Law, but no ornament on sleeves or front :—hood, scarlet cloth, lined with pink silk and edged with purple.

10. Doctor of Divinity :—black silk gown with full bag sleeve :—hood, scarlet cloth, lined with the same.

11. Doctors of Laws, Doctors of Civil Law, and Doctors of Medicine shall be entitled to wear a scarlet robe similar to that of the University of Cambridge, for full dress at Convocations.

Licensed Boarding Houses.

(*Regulations for Students in Arts, passed by Corporation, April* 1875.)

1. All Students under 21 years of age, not residing with parents or guardians or belonging to a Theological College, shall reside in licensed boarding houses, unless they produce written authority from parents or guardians to reside elsewhere.

2. Persons applying for a license to keep a boarding-house, shall produce evidence satisfactory to the Principal, as to their character and fitness, and the suitability of the house for the health and comfort of the students. They shall also supply him with a statement of charges.

3. The College shall supply to the keeper of each licensed boarding-house a Register in which the following facts shall be recorded by him or her :—(1.) The dates of the Student's entrance into and departure from the house. (2.) The hours of return of the Student to the house on every occasion on which this may be later than 10 P. M. This Register shall be returned to the Faculty at the end of every month.

4. The keeper of the boarding-house shall report immediately, to the Principal, the entrance or departure of any Student, and any instance of immoral or disorderly conduct.

5. THE STEWART PRIZE of $20, is open to all Undergraduates, and also to Graduates of this or any other University studying Theology in any College affiliated to this University, under the following rules :—

1. The prizes will not be given for less than a thorough examination in Hebrew Grammar, passed in the First Class, in reading and translating the Pentateuch, and such poetic portions of the Scriptures as may be determined.

2. In case competitors should fail to attain the above standard, the prize will be withheld and a prize of Forty Dollars will be offered in the following year for the same.

[Course for the present year :—Hebrew Grammar (Gesenius) ; Translation and analysis of the first ten chapters of Genesis ; the prophet Habakkuk (the whole book) ; and the first five Psalms.]

3. There will be two Examinations of three hours each, one in Grammar, and the other in Translation and Analysis.

This Prize founded by the late Rev. C. C. Stewart M.A., and which terminated last year by his death, has been re-established by the liberality of Neil Stewart Esq., of Vankleek Hill, and will be offered for competition next Session.

CONTENTS.

FACULTY OF ARTS 13

Course of Study 13

Matriculation 14

Scholarships, &c, ... 15

Examinations, Exemptions &c., ... 19

Courses of Lectures 28

DEPARTMENT OF APPLIED SCIENCE 40

FACULTY OF MEDICINE 52

FACULTY OF LAW 66

PRIZES, HONOURS AND STANDING 72

SCHOLARSHIPS AND EXHIBITIONS 1875—6 85

CATALOGUE OF STUDENTS 86

GRADUATING CLASSES, &c., 1874—5 90

CATALOGUE OF GRADUATES 93

DONATIONS TO LIBRARY AND MUSEUM 104

MCGILL NORMAL SCHOOL 108

SCHOOL EXAMINATIONS 116

ADDENDA.—Dufferin's Medal, Fees, Academic Dress, Licensed Boarding Houses, Stewart Prize 121

Examination Papers

OF THE

McGILL UNIVERSITY,

MONTREAL.

SESSION OF 1874-75.

Montreal:
PRINTED BY LOVELL PRINTING AND PUBLISHING COMPANY,
St. Nicholas Street.
1875.

ORDER OF EXAMINATION PAPERS.

SCHOLARSHIP AND EXHIBITION EXAMINATIONS, 1873.

PAGE 1

CHRISTMAS EXAMINATIONS, 1873.

CLASSICS 24
MATHEMATICS AND NATURAL PHILOSOPHY 35
ENGLISH LANGUAGE AND LITERATURE 40
LOGIC AND MENTAL AND MORAL PHILOSOPHY 42
MODERN LANGUAGES (French and German) 44
HEBREW 51
NATURAL SCIENCES--(Chemistry—Botany—Zoology —Mineralogy and Physical Geology) 53
PRACTICAL AND APPLIED SCIENCE—(Surveying— Practical Mechanics — Assaying — Mining and Metallurgy—Engineering) 55

SESSIONAL EXAMINATIONS, 1874.

CLASSICS :—
(1) *Ordinary* 61
(2) *Honour* 86
MATHEMATICS AND NATURAL PHILOSOPHY :—
(1) *Ordinary* 94
(2) *Honour* 104
ENGLISH LITERATURE :—
(1) *Ordinary* 117
LOGIC AND MENTAL AND MORAL PHILOSOPHY :—
(1) *Ordinary* 120
(2) *Honour* 124
MODERN LANGUAGES :—
(1) *French* 129
(2) *German* 132
HEBREW AND CHALDE 135
NATURAL SCIENCES AND CHEMISTRY :—(Botany—Zoology —Geology—Mineralogy — Lithology and Physical Geology—Geology and Palmontology) :—
(1) *Ordinary* 137
(2) *Honour* 140
PRACTICAL AND APPLIED SCIENCE :—(Civil Engineering —Mining — Surveying— Engineering— Assaying— Elementary Chemistry) 141
EXAMINATION PAPERS IN LAW 154
EXAMINATION PAPERS IN MEDICINE 164
EXAMINATIONS FOR SCHOOL CERTIFICATE 170

EXHIBITIONS AND SCHOLARSHIPS, 1874.

FIRST YEAR EXHIBITIONS.

GREEK.

TUESDAY, SEPTEMBER 15TH:—MORNING, 9 TO 12.

Examiner..... .....REV. GEORGE CORNISH, LL.D.

1. Translate:—(A) Homer, Iliad, I., vss. 148—162; and (B) ib., vss. 428—439.

2. (*a*) Construe carefully, giving the grammatical terms by which the usages are severally designated, the following from the above extracts:—*πόδας, ἀναιδείην, Ἀχαιῶν, ὁδόν, ἀνδράσι, τί μοι αἴτιοι, γυναικός, ἀέκοντος.* (*b*) Describe, with a sketch, if you can, *ἰστία, ἱστός, πρότονοι, πρυμνήσια, εἶναί.* (*c*) Designate the metre of the Iliad, and name the kinds of poetry in which it was used by the Greeks. Also write down the scale, and point out where the two principal *caesuras* occur. Scan the first four vss. of ext. (A), and point out any metrical peculiarities.

3. Parse carefully the following verbs:—*ἐπιειμένε, ἐλθέμεναι, ἦλυθον, ἦλασαν, ἐσπόμεθα, ἀπηύρων, θέσαν, ὑφέντες, βῆσαν, βαῖνον.* Give Attic equivalent forms of any.

4. Translate:—(C) Xenophon, Anabasis, I., chap. iii. sec. 9—12, inclusive; and (D) ib., ix., sec. 13.

5. (1) *τὰ Κύρου*,—to what is this equivalent as a grammatical form of expression in Greek? (2) *οὕτως ἔχει*,—explain this idiom. (3) *σύνοιδα ἐμαυτῷ πάντα ἐψευσμένος αὐτόν*,—explain this construction and cite imitations of it by Virgil. (4) *ὧν νομίζει*,—why the Genitive? (5) *ἦν ἰδεῖν*, express the same in Latin.

6. Derive and explain the following words from Homer and Xenophon, and write down the *Nom. Sing.* of the oblique cases:—*σπονδάς, ὁμοτράπεζοι, ἡνιόχων, σύνθημα, ποδήρεσι, σταθμῶν, ἐριβώλακι, κυνῶπα, ἄφενος, ῥήγμῖνι, δαῖτα, ἀλός.*

7. Write a short account of the life and times of Xenophon, introducing dates.

8. Translate:—(E) Lucian, Charon, sec. 15 (p. 216, Ed. Teubner.). Explain the allusion to Tantalus. Write an outline of the Charon. With what object was it written? Where was Lucian born, and when did he probably live?

9. (*a*) Write down the three characters that represent consonantal combinations in the Greek alphabet, and name the consonants that can end words. (*b*) Decline:—*γόνυ*, *κύων*, *ὄρνις*, *βοῦς*, *γυνή*, and point out any varieties or irregularities of form that occur in these. (*c*) Illustrate the comparison of adjectives in Greek. (*d*) Distinguish between:—*παρὰ νηῶν*, *παρὰ νησί*, and *παρὰ νῆας*. *ἐπὶ Κύρου*, *ἐπὶ Κύρῳ*, and *ἐπὶ Κῦρον*. *ὁ ἀγαθὸς ἀνὴρ* and *ἀγαθὸς ὁ ἀνήρ*. *πάντα δέκα* and *τὰ πάντα δέκα*.

10. Translate into Greek:—(1) He admires and praises the good man. (2) The men of the city said this. (3) Cyrus sent for the ships that he might land the heavy armed troops. (4) Both the father and his daughter are good. (5) The Persians were fighting a great battle, but they were conquered by the Greeks.

LATIN.

TUESDAY, SEPTEMBER 15th:—AFTERNOON, 2 TO 5.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Translate:—(A) Livy, Bk. V., chap. xxi., down to *ad dictatorem ferrent*.

2. (*a*) Give the received date of the events described in the above extract. (*b*) Define and distinguish between the styles of reporting designated severally *oratio obliqua* and *oratio recta*, illustrating by citations from ext. (A). (*c*) Explain the meaning of:—*auspicato*, *Pythice*, *cuniculo*, *haruspicis*.

3. Translate (B) Horace, Odes Bk. I., xxii.; and (C), ib., xxxi.

4. (*a*) In extt. (B) and (C) carefully parse and show the construction of:—(1) vitæ scelerisque. (2) jaculis. (3) sagittis. (4) curis expeditis. (5) premant. (6) paratis. (*b*) Write short explanatory geographical notes on:—(1) Mauris. (2) Syrtes. (3) Hydaspes. (4) Daunias. (5) Liris. (6) Calena. (*c*) Name, and give the scales of the metres of ext. (B) and scan the first stanza.

5. Translate:—(D) Cicero, Pro Lege Manil., xvi. (§ 47).

6. "Maximo, Marcello, Scipioni, Mario:"— short biographical notes, with dates.

7. Analyse and parse the following verbs, giving also their principal parts:—ineunte, lacessitus, districti, pensitant, depressam, prostrato, obedierint, obsolevit, collatis.

8. (*a*) Decline in the *Singular*:—genus, servitus, nux, domus; and in the *Plural*:—nix, lapis, iter, bos. (b) Give the *Gen. Sing.* and *Dat. Plu.* of:—iter, latus, tempus, filia, artus, scurra. (*c*) Decline:—Quis, celer, uter, idem.

9. (*a*) Write down the principal parts of:—cupio, cumbo, vincio, cædo. (*b*) Inflect the Pres. Subj. Pass. of juvo; the Perf. Subj. Act of cedo; and the Imp. Subj. of volo, and mark the quantity of the *penultimate* of each form.

10. Translate into Latin:—

1. If I shall hear that both you and your friends are miserable it will grieve me much. 2. Cicero, the consul, overcame Catiline and his companions, and on that account was greeted as father of his Country. 3. Capua, the chief city of Campania, was taken by Hannibal, general of the Carthaginians, in the second Punic War. 4. Homer is rightly called the king of poets, and Demosthenes the prince of orators. 5. The envoys came to the general and informed him of their business, but he concealed from them his own opinion. 6. He left his helmet in his tent, and on entering the town he was struck on the head with a large stone and slain. 7. He was accustomed to watch over the interests of the good, but the bad he held in low esteem. 8. When news had come of the defeat of the enemy the consul returned to Rome, and pitched his camp three miles from the city.

MATHEMATICS.

WEDNESDAY, SEPTEMBER 16TH:—MORNING, 9 TO 12.

Examiner,..... .....ALEXANDER JOHNSON, LL.D.

1. Parallelograms upon equal bases and between the same parallels are equal to one another.

2. The square on the hypotenuse of a right angled triangle is equal to the sum of the squares described on the sides.

a. If a perpendicular be let fall upon the base of any triangle the difference of the square of the sides is equal to the difference of the squares of the segments of the base.

3. Cut a line so that the rectangle under the whole and one part shall be equal to the square of the other. Prove that the latter is the greater segment.

4. The sum of the squares of the sides of any quadrilateral exceeds the sum of the squares of the diagonals by four times the square of the line joining the middle points of the diagonals.

5. Equal chords in a circle are equally distant from the centre.

6. If from any point without a circle two straight lines be drawn, one cutting and the other touching the circle the rectangle under the whole secant and the external segment is equal to the square of the tangent.

7. Construct an isosceles triangle each of whose base angles shall be double the vertical.

8. Inscribe a regular quindecagon in a given circle.

9. Given the base, area, and vertical angle of a triangle; describe it.

10. The triangle formed by joining the middle points of the sides of any triangle is equal to one-fourth of it.

MATHEMATICS.

WEDNESDAY, SEPTEMBER 16TH :—AFTERNOON, 2 TO 5.

Examiner.....ALEXANDER JOHNSON, LL.D.

1. The sum of 15 terms of an arithmetic series is 600, and the common difference is 5; find the first term.

2. Find the last term and the sum to 7 terms of the series

$$1 - 4 + 16 - \text{\&c.}$$

3. Find the arithmetical, geometric, and harmonic means between $3\frac{3}{8}$ and $1\frac{1}{2}$.

4. The difference between the hypotenuse and each of the two sides of a right-angled triangle is 3 and 6 respectively; find the sides.

5. The sum of the two digits of a certain number is six times their difference, and the number itself exceeds six times their sum by 3; find it.

6. Solve the equations :—

$$x - y = 1 \; ; \; x^3 - y^3 = 19$$

$$\frac{3x-7}{x} + \frac{4x-10}{x+5} = 3\tfrac{1}{2}$$

$$x - \frac{1}{7}(y-2) = 5 \; ; \; 4y - \tfrac{1}{3}(x+10) = 3.$$

$$\frac{132x+1}{3x+1} + \frac{8x+5}{x-1} = 52.$$

7. A man could reap a field by himself in 20 hours, but with his son's help for 6 hours, he could do it in 16 hours; how long would the son be in reaping the field by himself?

8. Find the value in its simplest form of

$$\frac{x+y}{y} - \frac{2x}{x+y} + \frac{x^2y - x_3}{x^2y - y^3} \; .$$

9. Find the greatest common measure of

$$3x^3 + 3x^2 - 15x + 9 \text{ and } 3x^4 + 3x^3 - 21x^2 - 9x$$

10. Extract the square root of 28.8369.

11. Find a fourth proportional to
3.81 .085 and .0023

12. Find the interest on £231 6s. 8d. for 175 days at 6½ per cent. per annum.

13. Find the least common multiple of 1, 3, 5, 7, 9, 11, and 15.

ENGLISH GRAMMAR.

THURSDAY, SEPTEMBER 17TH :—MORNING, 9 TO 12.

Examiner,..... VEN. ARCHDEACON LEACH, D. C. L.

1. Mention and explain the five classes of Nouns.

2. Which are the Demonstrative Pronouns?

3. Mention the different ways in which "it" is employed.

4. Explain the two different Significations in which "who" is employed. —When may "that" be properly used for "who"?

5. Which are the principal adverbial substitutes for the Demonstrative Adjectives?

6. Give examples of Intransitive Verbs.

7. What are verbs of Incomplete predication?

8. What are the equivalents of the Adverb in Composition?

9. How is the employment of Adjectives for Adverbs accounted for?

10. How is the Preposition defined?

11. How are Prepositions distinguished from Conjunctions?

12. Distinguish Co-ordinating and Subordinating Conjunctions.

13. Give examples of the different forms of the Sentence;—and mention the parts into which the Sentence is divided.

14. What are Adverbial Phrases?

15. Which are the different ways of distinguishing the Genders of Nouns?

16. In what number (singular or plural) are the following Nouns— "news," "means," "tidings," summons," "mathematics," &c.

17. To what classes of nouns is the Possessive Inflection confined?

18. Give the rules for the Comparison of Adjectives.

Subject of Composition:—Honesty is the best policy.

SECOND YEAR EXHIBITIONS.

GREEK.

TUESDAY, SEPTEMBER 15TH :—AFTERNOON, 3 TO 5.

Examiner.....REV. GEORGE CORNISH, LL.D.

1. Translate :—(A) Homer, Odyssey, IX., vss. 39—50 ; and (B), ib., vss. 353—370.

2. (*a*) Write explanatory notes, giving at the same time the etymology of such as you can, on the following epithets :—vs. 21—*εὐδείελον*, 22—*ἀριπρεπές*, 25—*χθαμαλή*, 46—*εἰλίποδας*, 52—*ἠέριοι*, 70—*ἐπικάρσιαι*, 243—*ἠλίβατον*, 322—*ἐεικοσόροιο*, 404—*ἀμβροσίην*, 447—*πέπον*. (*b*) vss. 366 and 414—*οὔτις* and *μῆτις* :—what do you note in these words? (*c*) Explain the geographical references of vss. 21—26.

3. Translate :—(*c*) Homer, Iliad VI., vss. 421—439.

4. (*a*) Parse and explain the formation of the following :—*ἔσαν*, *κατέπεφνε*, *ἀργεννῆς*, *ἤγαγε*, *βάλε*, *θήης*, *ἔπλετο*, *ἀνώγει*, *γύναι*, *εὔρρειος*. (*b*) vs. 424, *ἐπ'*—why no accent? 425, *μητέρα*—explain the use of the accusative. 436-37, *Αἴαντε*, *Ἀτρείδας*, *Τυδέος υἱὸν*—give their names. (*c*) Give Attic forms for the following :—*φόως*, *κληῖδι*, *γοίνωΐ*, *δοῦρε*, *φάν*, *ἵκηαι*.

5. Translate :—(D) Xenophon, Hellenics, I., chap. vii. secs. 5—7.

6. (*a*) What have you to remark on the verbs *ἀπελογήσατο*, *πλέοιεν*, *ἔπειθον*, in ext. (D)? (*b*) Explain (1) *προυτέθη λόγος*, (2) *τὰς χεῖρας οὐκ ἂν καθεώρων*, (3) *τὴν βουλὴν προβουλεύσασαν*, (4) *Ἀπατούρια*, (5) sec. 9, *διαψηφίσασθαι κατὰ φυλάς*, (6) *οἱ πρυτάνεις*, (7) *τὸ βάραθρον*, (8) *ἡ ἐκκλησία*. (*c*) What period of the Peloponnesian War is covered by this book of the Hellenics?

7. Translate :—(E) Arrian, III., chap. xv., secs. 1 and 2.

8. (*a*) Explain the construction of *ἔστιν οἷς*. (*b*) *ὡς μονην * * οἷα δὴ * * ἀγωνιζόμενοι* :—Explain the difference of meaning between *ὡς* and *οἷα* (*οἷον*, *ἅτε*) as adjuncts of the participle. (*c*) State what you know of Arrian and his writings.

9. (*a*) Classify the letters of the Greek alphabet. (*b*) What is meant by *euphony of consonants*? Correct the spelling of the following, where wrong, according to Attic usage :—*ὀδμή*, *ἰσθι*, *γράφδην*, *πλέκδην*, *ἐλέχθην*, *πέπατμαι*, *σεβνός*, *βήχς*. (*c*) Accentuate the following words with their proper accents, respectively, on the first syllable of each, and point out how the quantity of the ultimate affects the accent :—*ἀνθρωπος*, *ἀνθρωποι*, *χωρᾱ*, *γλωσσα*, *ληξαι* (*inf.*).

10. Translate into Greek, with accents:—(1) The general said that the soldiers ought to fight bravely. (2) He said that if the king would trust him, he would obey him in all things. (3) They arrived just three days too late for the battle and then sailed down the river. (4) Under the leadership of Pericles the Athenians accomplished many noble works.

LATIN.

TUESDAY, SEPTEMBER 15TH:—MORNING, 9 TO 12.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Translate:—(A) Virgil, Æneid, Bk. VI., vss. 827—841. (*Ed. Tauchnitz.*)

2. (*a*) Note and explain any peculiarity of quantity in vs. 827. (*b*) Socer, gener, Monoeci, ille (vss. 837 and 839):—Explain the references. (*c*) Eois, animis, aggeribus:—construe.

3. Translate:—(B) Horace, Odes, Bk. III., ode XXX.

4. (*a*) Name the metre and scan the first four vss. of ext. (B). (*b*) Aquila impotens, Libitinam, tacita virgine, Aeolium carmen:—explain these allusions. (*c*) Agrestium regnavit populorum:—explain the construction, and also of possit, in vs. 5.

5. Translate:—(C) Livy, Bk. V., chap. li., down to *quam adversa fecit?* Give the date of the events here referred to, with a short account of the story of Camillus.

6. Translate:—(D) Cicero, Select Letters:—

TULLIUS ET CICERO TIRONI SUO SAL. PLUR. DIC.

Nos a te, ut scis, discessimus a. d. IIII. Non. Nov.; Leucadem venimus a. d. VIII. Id. Nov., a. d. VII. Actium; ibi propter tempestatem a. d. VI. Id. morati sumus. Inde a. d. V. Id. Corcyram bellissime navigavimus. Corcyrae fuimus usque ad. a. d. XVI. K. Dec. tempestatibus retenti. A. d. XV. K. in portum Corcyræorum ad Cassiopen stadia CXX. processimus; ibi retenti ventis sumus usque ad a. d. VIII. K. Interea, qui cupide profecti sunt, multi naufragia fecerunt. Nos eo die cenati solvimus: inde austro lenissimo, caelo sereno, nocte illa et die postero in Italiam ad Hydruntem ludibundi pervenimus, eodemque vento postridie—id erat a. d. VII. K. Dec.—hora IIII. Brundisium venimus, eodemque tempore simul nobiscum in oppidum introiit Terentia, quae te facit plurimi. A. D. V. K. Dec. servus Cn. Plancii Brundisii tandem aliquando mihi a te exspectatissimas litteras reddidit, datas Idibus Nov., quae me molestia valde levarunt, utinam omnino liberassent! sed tamen Asclapo medicus plane confirmat propediem te valentem fore.

(Be careful to give the dates of the above ext. according to our English method.) Stadia CXX:—how far? Hora IV:—what o'clock? Express in Latin, according to the Roman method of reckoning, Sept. 15, 1874.

7. Parse the following verbs and give their principal parts:—lautus, verebare, decesse, vererere, pareret, fefellerit, adamaris, aspernabere.

8. (*a*) Give the difference in meaning between:—lātus, lătus; dūcis, dŭcis; rĕfert, rēfert; edŭcet, edūcet. (*b*) Mark the quantity of the *penultimate* of the following:—Pristinam, maritimus, infamis, parricida, illecebra, plaga (*stroke*), plaga (*district*), nitere (*imperat.*), nitere (*fut.*). (*c*) What is the quantity of the *ultimate* of the possessive pronouns in such expressions as *mea, vestra, nostra, interest* and *refert?* In what case is the pronoun? Analyse and explain the expression.

9. (*a*) Decline the following nouns:—Deus, securis, nix, lacus. (*b*) Write down the Comparative and Superlative of the following adjectives:—Brevis, dives, externus, utilis, similis. (*c*) Write down the Perfect and Supines of the following verbs: —Plico, pendeo, mordeo, quæro, fingo.

10. Translate into Latin:—

Jugurtha was taken prisoner. The great traitor fell by the treachery of his nearest relatives. Lucius Sulla brought the crafty and restless African in chains along with his children to the Roman head-quarters: and the war, which had lasted for seven years, was at an end. The victory was associated with the name of Marius. King Jugurtha in royal robes, and in chains, along with his two sons, preceded the triumphal chariot of the victor, when he entered Rome on January 1, 650. By his orders the son of the desert perished a few days afterwards in the subterranean city prison, the old Tullianum, at the capitol, "the bath of ice," as the African called it, when he crossed the threshold, in order either to be strangled, or to perish from cold and hunger there.

GEOMETRY AND ALGEBRA.

WEDNESDAY, SEPTEMBER 16TH:—AFTERNOON, 2 TO 5.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. If on the three diagonals of a complete quadrilateral, as diameters, circles be described, they shall have the same radical axis, and cut orthogonally the circle circumscribing the triangle formed by the three diagonals.

2. Given a triangle, describe the circle with respect to which the triangle is self-conjugate.

3. If a transversal be drawn through a centre of similitude of two circles and intersecting them, the rectangle under the distance of either pair of non-corresponding points from the centre of similitude is constant.

4. If through any point inside or outside a circle secants be drawn, the straight lines joining the extremities of the chords intersect on the polar of that point.

5. Through a given point, draw a straight line so as to form with the sides of a given angle a triangle of given area.

6. Given a straight line and two points on the same side of it; find a point in the given line at which the two given points shall subtend a maximum angle.

7. One vertex of a rectangle turns round a fixed point, and the two adjacent vertices move along a given circle; find the locus of the remaining vertex.

8. The straight lines joining the opposite angles of any hexagon described about a circle pass through the same point.

9. Divide 14332216 by 6541 in the septenary scale.

10. The total number of combinations of 2 n things$=$65 times the total number of combinations of n things, find n.

11. Resolve $\frac{1}{a^4 - x^4}$ into its partial fractions by the method of Indeterminate Co-efficients.

12. Expand a^x in a series of powers of x.

13. Find a series of converging fractions for $\frac{5}{7}\frac{4}{7}$.

14. Find the sum of n terms of the series

$$1 + 3x + 5x^2 + 7x^3 + \&c.$$

GEOMETRY, ALGEBRA, AND TRIGONOMETRY.

WEDNESDAY, SEPTEMBER 16TH:—AFTERNOON, 2 TO 5.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. The tangents of the extremities of a focal chord of an hyperbola intersect in the directrix.

2. If two chords of an hyperbola intersect one another, the rectangles contained by their segments are proportional to the squares of the diameters parallel to them.

3. The above (No. 2) is true also for the ellipse.

4. The area of any parallelogram formed by drawing tangents to an ellipse at the extremities of a pair of conjugate diameters is equal to the rectangle contained by the axes of the ellipse.

5. Draw a pair of tangents to a parabola from a point without it.

6. The chord of the circle of curvature at a point P of a parabola, drawn parallel to the axis, is equal to 4 S P. S being the focus.

7. If two straight lines be at right angles to the same plane, they shall be parallel to one another.

8. If two planes which cut one another, be each of them perpendicular to a third plane; their common section shall be perpendicular to the same plane.

9. The number of combinations of $\frac{1}{2}n$ things 2 together, is 15, find n.

10. Find a formula for computing the amount of a given sum, in any given time, at compound interest.

11. Prove,

$$\text{Sin } \tfrac{1}{2} \text{ A} = \tfrac{1}{2} \left\{ \sqrt{1 + \text{in A}} - \sqrt{1 - \text{sin A}} \right\}$$

12. Show how to find the distance between two objects which are inaccessible to each other, and also to the observer from two stations, the distance between which may be measured.

13. The three sides of a triangle are 110, 150 and 185 yards respectively, calculate the angle opposite the first.

FRENCH.

FRIDAY, SEPTEMBER 18TH:—MORNING, 9 TO 12.

Examiner,.....P. J. DAREY, M.A., B.C.L.

I. Give a very short analysis of the three comedies of Molière: *l'Avare*, *les Femmes savantes*, and the *Misanthrope*.

II. What are the two principal characters in each of the comedies mentioned above?

III. Which of those comedies do you prefer? Why?

IV. Translate into English:

> —Timante encore, madame, est un bon caractère.
> —C'est de la tête aux pieds un homme tout mystère,
> Qui vous jette en passant, un coup d'œil égaré,
> Et sans aucune affaire, est toujours affairé.
> Tout ce qu'il vous débite en grimaces abonde,
> A force de façons, il assomme le monde;
> Sans cesse il a, tout bas, pour rompre l'entretien,
> Un secret à vous dire, et ce secret n'est rien;
> De la moindre vétille il fait une merveille,
> Et jusques au bonjour, il dit tout à l'oreille.
>
> *Le Misanthrope.*

V. Parse the two first lines of the above extract.

VI. Point out all the irregular verbs in the above extract, and prove their irregularity.

VII. Translate into French :

Some of the most pleasing and piquant descriptions of America, and life there, at the period and subsequent to the Revolutionary War, are to be found in the memoirs and correspondence of French allies and *émigrés*. In some instances, instead of an episode our Gallic visitors have expanded their observations into separate volumes; but even the casual mention of places and persons, character and customs that are interwoven in the biography and journals of some of the French officers are noteworthy as illustrations of the times, especially in a social point of view.

Tuckerman.

CHEMISTRY.

FRIDAY, SEPTEMBER 18TH :—AFTERNOON, 2 TO 5.

Examiner,.....B. J. HARRINGTON, B.A., Ph.D.

1. In what ways may salts of the metals be obtained ?

2. What is the most scientific basis for the classification of the metals ?

3. What are the principal salts of Silver, and what their uses ?

4. Give the chemical formulæ for Quicklime, Gypsum, Epsom Salts, Blue Vitriol, and Vermilion.

5. What are the best tests for Copper and Zinc when in solution ?

6. Explain the difference between Mercurous and Mercuric salts.

7. What are the properties and uses of the metal Platinum.

8. Describe Reinsch's test for the detection of Arsenic.

9. What are the symbols and atomic weights of Gold, Lead, Tin, Aluminium and Bismuth ?

SCIENCE SCHOLARSHIPS.

BOTANY.

THURSDAY, SEPTEMBER 17TH :—MORNING, 9 TO 12 ; AND AFTERNOON, 2 TO 5.

Examiner,..... J. W. DAWSON, LL.D., F.R.S.

1. Describe the tissues found in the Endogenous stem.

2. Describe the fructification in *Polypodineæ*.

3. Mention the arrangements for conveying the Pollen to the Stigma.

4. Describe some of the more interesting Epidermal Hairs and other appendages observed in Canadian Plants.

5. Give a detailed account of any order of Canadian plants containing timber-trees, with its more important species.

6. Describe the parts of the flower of a grass, and state in what respects they differ from those of *Juncus* and *Carex*.

7. By what characters would you recognize plants of the following genera.—*Anemone*, *Kalmia*, *Sarracenia*, *Aralia*.

8. Characterize the order *Leguminosæ*, and describe one of its generic forms.

9. What are the principal generic forms representing the orders *Papaveraceæ*, *Caprifoliaceæ*, *Orchidaceæ*, in Canada ?

10. Characterize the orders *Hypericaceæ*, *Violaceæ* and *Umbelliferæ*, and name the principal generic forms of one of them.

11. What are the principal generic forms representing the orders *Cruciferæ*, *Compositæ*, *Betulaceæ*, and *Liliaceæ* in Canada.

12. Give a detailed account of any order of Canadian plants containing conspicuously flowering shrubs, with its most important species.

13. Describe the Flower and Fruit in the genena *Pinus* and *Thuja*.

14. Describe the Canadian species of Herbaceous Cornels.

15. What Endogenous orders have netted-veined leaves. Describe one of them.

16. What is the distinction between *Vaccineæ* and *Ericineæ* ; *Polygnum* and *Rumex* ; *Salix* and *Populus*.

Special Examination on Plants :—Friday, 9 a.m. to 12.

CHEMISTRY.

Friday, September 18th :—Afternoon, 2 to 5.

Examiner,.....B. J. Harrington, B.A., Ph.D.

1. Define an atom, a molecule, and a compound radicle.

2. What do you understand by acid, normal, and double salts ? Give examples.

3. A gas-holder of 30 litres capacity is to be filled with Hydrogen at the standard temperature and pressure. How much Zinc will be required for the preparation of the gas ?

4. What are the products of the action of Hydric Nitrate upon Copper ?

5. Classify the following metals according to their atomicity : Fe, Ca, Sn, Sb, K, Ag.

6. How are soluble salts of Barium produced from the insoluble Sulphate ?

7. What are the properties and uses of metallic Bismuth ?

5. What were the leading states of Greece at the time of the Persian War, and what part did they severally take? What important results followed this war?

6. Mention the principal epochs of Greek colonization, and the states most famous for their colonies.

7. An outline of the events, with dates, which led to the Roman subjugation of Greece.

8. The character and policy of Cicero.

9. A sketch of the life and administration of Julius Cæsar.

10. A short account of the important events, in the history of Rome, that occurred in the years 68–69, A.D.

ENGLISH LITERATURE.

THURSDAY, SEPTEMBER 17TH:—MORNING, 9 TO 12.

Examiner,.....VEN. ARCHDEACON LEACH, D.C.L.

1. Mention, with dates, the different periods into which the history of the English language is usually divided, and give Dr. Marsh's rectifications of the same.

2. Mention the principal works in Anglo-Saxon poetry and prose.

3. What are the qualities that are chiefly characteristic of Anglo-Saxon literature and the causes thereof?

4. Give the substance of Spalding's account of the Irregular Latin Literature of the Norman times.

5. Give the substance of what is said on the subject of Norman French literature.

6. Desbribe the events that in the early years of the sixteenth century exerted chiefly a literary influence in England, and mention the names o. the most distinguished authors of the times referred to.

7. In what respects are the works of Lord Surry interesting in the history of English literature?

8. Give some account of the rise and progress of the English drama.

9. Give the substance of remarks on the conditions favorable to the cultivation of literature in the reign of Elizabeth.

10. Mention the principal literary works that belong to the reign of James I. and Charles I. and to the period of the Commonwealth and Protectorate.

11. Give the substanee of Lord Bacon's Essay on Envy; with critical remarks.

ENGLISH LANGUAGE.

THURSDAY, SEPTEMBER 17TH:—AFTERNOON, 2 TO 5.

Examiner,..... ....VEN. ARCHDEACON LEACH, D.C.L.

1. Give the inflections of Anglo-Saxon nouns, and mention the traces of them that remain.

2 Give some examples of compound proper names.

3. How are Anglo-Saxon adjectives declined?

4. How are the degrees of Comparison denoted in Anglo-Saxon adjectives and adverbs?

5. Mention the different ways in which Anglo-Saxon adjectives are formed, and give examples.

6. Decline the pronoun of the third person.

7. Give the cardinal numbers as far as "thrittig," and the ordinal numbers as far as "se twelfta."

8. Conjugate the verbs "syllan" and "habban."

9. How are the verbs classified or divided?

10. What cases of nouns are governed by Prepositions?

11. Translate the following phrases and give the rules of syntax:—"thaes cildes faeder," "he wa'es aethelre strynde," "this wa'es feorthes gea'res," "ealles his maegnes," "se betsta Romana," "se hatte Lucifer," "forth nihtes."

12. Trace the change of signification in the following words:—carriages, religion, kindly, worship, painful, treacle, blackguard, acre, furlong, polite, bombast, gossip, to engross, to forestal.

13. Give examples of the process by which words are increased by different spelling.

14. Give examples of wrongly assumed derivation of words altering their spelling.

FRENCH.

FRIDAY, SEPTEMBER 18TH:—MORNING, 9 to 12.

Examiner, ...P. J. DAREY, M.A., B.C.L.

1. Give a short *resumé* of the tragedy of RACINE, *Andromaque.*

2. From whom did Racine, get the subjects of the three tragedies, *Britannicus*, *Andromaque, and Iphigénie?* Relate the *denouement of Iphigénie's.*

3. Translate into English:

Hé bien! il faut le perdre, et prévenir sa grâce;
Il faut.. .....Mais cependant que faut-il que je fasse?
Comment puis-je sitôt servir votre courroux?
Quel chemin jusqu'à lui peut conduire mes coups?
A peine suis-je encore arrivé dans l'Epire,
Vous voulez par mes mains renverser un empire;
Vous voulez qu'un roi meure; et pour son châtiment
Vous ne donnez qu'un jour, qu'une heure, qu'un moment;
Aux yeux de tout son peuple il faut que je l'opprime.
Laissez-moi vers l'autel conduire ma victime,
Je ne m'en défends plus; et je ne veux qu'aller
Reconnaître la place où je dois l'immoler:
Cette nuit je vous sers, cette nuit je l'attaque.

RACINE, *Andromaque.*

4. Give the rules for the use of the four tenses of the *Subjunctive mood* in French. And give an example for each tense.

5. State the rule to write the *past participle* in French, when it is followed by an *infinitive.* Give two examples.

6. Translate into French:

The art of reading foreign languages, if generally cultivated throughout the civilized world, would greatly facilitate international relations: every one writing in his own language would then be understoed abroad. Diplomatists, scientific men, and merchants, especially, would derive incalculable advantages from this attainment; they would cease to be dependent on interpreters and clerks, who often write so inaccurately as greatly to perplex their correspondents. International communication has, until this time, been impeded by the extreme difficulty of writing a foreign language.—It is in order to gain familiarity with especially—a very numerous class of expressions not accessible through rules—that we must have recourse to the extensive reading of popular works in the absence of social intercourse with foreigners.

MARCEL, *Study of Languages.*

ENGLISH GRAMMAR.

THURSDAY, SEPTEMBER 17TH:—MORNING, 9 TO 12.

Examiner,..... VEN. ARCHDEACON LEACH, D. C. L.

1. Mention and explain the five classes of Nouns.

2. Which are the Demonstrative Pronouns?

3. Mention the different ways in which "it" is employed.

4. Explain the two different Significations in which "who" is employed. —When may "that" be properly used for "who"?

5. Which are the principal adverbial substitutes for the Demonstrative Adjectives?

6. Give examples of Intransitive Verbs.

7. What are verbs of Incomplete predication?

8. What are the equivalents of the Adverb in Composition?

9. How is the employment of Adjectives for Adverbs accounted for?

10. How is the Preposition defined?

11. How are Prepositions distinguished from Conjunctions?

12. Distinguish Co-ordinating and Subordinating Conjunctions.

13. Give examples of the different forms of the Sentence;—and mention the parts into which the Sentence is divided.

14. What are Adverbial Phrases?

15. Which are the different ways of distinguishing the Genders of Nouns?

16. In what number (singular or plural) are the following Nouns—"news," "means," "tidings," summons," "mathematics," &c.

17. To what classes of nouns is the Possessive Inflection confined?

18. Give the rules for the Comparison of Adjectives.

Subject of Composition:—Honesty is the best policy.

SCOTT EXHIBITION (MIDDLE YEAR).

EUCLID—ALGEBRA—TRIGONOMETRY.

WEDNESDAY, SEPTEMBER 16TH:—MORNING, 9 TO 12.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. Equal triangles which have one angle in each equal have the sides about the equal angles reciprocally proportional.

2. If two triangles which have two sides of the one proportional to two sides of the other, be joined at the one angle so as to have their homologous sides parallel to one another; the remaining sides shall be in a straight line.

3. In a given circle inscribe a regular hexagon.

4. If two chords of a circle intersect, whether inside or outside the circle, the rectangles under their segments are equal.) N. B.—One proof is to suit both cases.)

5. Find the square root of
$$4a^4 - 12a^3 + 25a^2 - 24a + 16.$$

6. Resolve,
$$2x^3y + 5x^2y^2 + 2xy^3$$
into elementary factors.

7. Multiply,

$$x + 2y^{\frac{1}{2}} + 3z^{\frac{1}{3}} \text{ by } x - 2y^{\frac{1}{3}} + 3z^{\frac{1}{3}}.$$

8. Solve the equation,

$$ax^2 + bx + c = o.$$

9. Prove,

$$\frac{\sin A + \sin B}{\sin A - \sin B} = \frac{\tan \frac{1}{2}(A + B)}{\tan \frac{1}{2}(A - B)}$$

10. If $\sin A = \frac{1}{2}$, find *sec. A.*

11. Calculate cos 36° to three places of decimals.

12. Prove that if the circular measure of any angle be given, the number of seconds in it may be found by multiplying the circular measure by 206 265.

ENGLISH HISTORY (HUME).

THURSDAY, SEPTEMBER 17TH:—AFTERNOON, 2 TO 5.

Examiner,.....VEN. ARCHDEACON LEACH, D.C.L.

1. Which were the seven Kingdoms of the Heptarchy? Show that term is incorrect.

2. Under whom were the Anglo-Saxon Kingdoms united? Give the date of this event.

3. Give some account of the policy of William I. for the Government of England; and in particular of the relation that he maintained with the Pope.

4. With whom did the Plantagenet race of Sovereigns begin, and with whom did it terminate!

5. Mention the circumstances connected with the murder of Becket.

6. Describe the state of affairs in Scotland that led to the intervention of Edward I.

7. Mention the events that led Edward I. to make war with France.

8. What was the claim that Edward III. advanced upon the Crown of France?

9. Give some account of the insurrection in Kent in the reign of Richard II.

10. Give an outline of the history of the Lollards.

11. Give an account of the battle of Bosworth, and of the preceding circumstances of the consequences of that event.

12. What was the Star Chamber?—its constitution and jurisdiction

13. Give the history of the Hampton Court Conferences.

14. Give the history of Strafford, his impeachment and death

ZOOLOGY.

FRIDAY, SEPTEMBER 18TH :—MORNING, 9 TO 12.

Examiner.....J. W. DAWSON, LL.D., F.R.S.

1. What are the Zoological and Geological relations of *Orthoceras*, *Murchisonia*, *Theca*.

2. What are the most important recent and fossil groups allied to the *Trilobites*, and how.

3. State the subdivisions of the Cephalopods, and mention the fossil families and genera.

4. Describe *Serpula*, *Hirudo*, *Sabella*.

5. Characterize the *Batrachia anoura*, with Canadian examples.

6. State the distinctive characters of the *Foraminifera* and their modern and geological distribution.

7. Characterize the *Tabulata* and *Rugosa*, and state their affinities with modern corals.

8. Describe the anatomy of *Actinia*, and its relation to the corals.

9. State the distinctive characters and geological distribution of *Spirifer*, *Orthis* and *Pentamerus*.

10. What is the nature and geological relations of Crinoids and Cystideans. Give Canadian examples of the genera.

11. State what you know of the specimens exhibited.

CHEMISTRY.

SEPTEMBER 18TH :—AFTERNOON, 2 TO 5.

Examiner,.....B. J. HARRINGTON, B.A., Ph.D.

1. State and explain the laws of combining proportion.

2. How may Ozone be prepared, and what are the best tests for its detection ?

3. What are the properties and what the principal uses of Chlorine ?

4. Explain the difference between monobasic, bibasic, and tribasic acids ? Give examples.

5. How is Nitrous Oxide prepared, and what are its properties?

6. What are the constituents of the atmosphere, and what their respective offices?

7. How may Iron, Silver, and Lead be detected, when in solution?

8. Explain the construction of the spectroscope, and its use in chemical investigations.

9. Give the formulæ of the principal salts of Potassium, and describe the preparation of one of them.

10. Give the symbols and atomic weights of Copper, Tin, Antimony, Gold and Platinum.

CHRISTMAS EXAMINATIONS, 1874.

CLASSICS.

FIRST YEAR.

GREEK.—XENOPHON.—HELLENICS, BOOK I.

MONDAY, DECEMBER 14TH:—MORNING, 9 TO 12.

Examiner.....REV. GEORGE CORNISH, LL.D.

1. Translate:—

(A) Οἱ δὲ Ἀθηναῖοι ἀνταναγαγόμενοι ἐναυμάχησαν περὶ Ἄβυδον κατὰ τὴν ἠόνα μέχρι δείλης ἐξ ἑωθινοῦ. καὶ τὰ μὲν νικώντων, τὰ δὲ νικωμένων, Ἀλκιβιάδης ἐπεισπλεῖ δυοῖν δεούσαις εἴκοσι ναυσίν. ἐντεῦθεν δὲ φυγὴ τῶν Πελοποννησίων ἐγένετο πρὸς τὴν Ἄβυδον· καὶ ὁ Φαρνάβαζος παρεβοήθει, καὶ ἐπεισβαίνων τῷ ἵππῳ εἰς τὴν θάλατταν μέχρι δυνατὸν ἦν ἐμάχετο, καὶ τοῖς ἄλλοις τοῖς αὐτοῦ ἱππεῦσι καὶ πεζοῖς παρεκελεύετο. συμφράξαντες δὲ τὰς ναῦς οἱ Πελοποννήσιοι καὶ παραταξάμενοι πρὸς τῇ γῇ ἐμάχοντο. Ἀθηναῖοι δὲ ἀπέπλευσαν, τριάκοντα ναῦς τῶν πολεμίων λαβόντες κενάς καὶ ἃς αὐτοὶ ἀπώλεσαν κομισάμενοι, εἰς Σηστόν. ἐντεῦθεν πλὴν τετταράκοντα νεῶν ἄλλαι ἄλλῃ ᾤχοντο ἐπ' ἀργυρολογίαν ἔξω τοῦ Ἑλλησπόντου· καὶ ὁ Θράσυλλος, εἰς ὢν τῶν στρατηγῶν, εἰς Ἀθήνας ἔπλευσε ταῦτα ἐξαγγελῶν καὶ στρατιὰν καὶ ναῦς αἰτήσων.

(B) Φαρνάβαζος μὲν οὖν εὐθὺς ἀπῄει, καὶ τοὺς παρὰ βασιλέα πορευομένους πρέσβεις ἁπαντᾶν ἐκέλευσεν εἰς Κύζικον. ἐπέμφθησαν δὲ Ἀθηναίων μὲν Δωρόθεος, Φιλοδίκης, Θεογένης, Εὐρυπτόλεμος, Μαντίθεος, σὺν δὲ τούτοις Ἀργεῖοι Κλεόστρατος, Πυρρόλοχος· ἐπορεύοντο δὲ καὶ Λακεδαιμονίων πρέσβεις Πασιππίδας καὶ ἕτεροι, μετὰ δὲ τούτων καὶ Ἑρμοκράτης, ἤδη φεύγων ἐκ Συρακουσῶν, καὶ ὁ ἀδελφὸς αὐτοῦ Πρόξενος. καὶ Φαρνάβαζος μὲν τούτους ἦγεν· οἱ δὲ Ἀθηναῖοι τὸ Βυζάντιον ἐπολίορκουν περιτειχίσαντες, καὶ πρὸς τὸ τεῖχος ἀκροβολισμοὺς καὶ προσβολὰς ἐποιοῦντο. ἐν δὲ τῷ Βυζαντίῳ ἦν Κλέαρχος Λακεδαιμόνιος ἁρμοστὴς καὶ σὺν αὐτῷ τῶν περιοίκων τινὲς καὶ τῶν νεοδαμωδῶν οὐ πολλοὶ καὶ Μεγαρεῖς καὶ ἄρχων αὐτῶν Ἕλιξος Μεγαρεὺς καὶ Βοιωτοὶ καὶ τούτων ἄρχων Κοιρατάδας. οἱ Ἀθηναῖοι ὡς οὐδὲν ἐδύναντο διαπράξασθαι κατ' ἰσχύν, ἐπεισαν τινας τῶν Βυζαντίων προδοῦναι τὴν πόλιν.

(C) Ἐμοὶ μὲν ἀρκεῖ οἶκοι μένειν, καὶ εἴτε Λύσανδρος εἴτε ἄλλος τις ἐμπειρότερος περὶ τὰ ναυτικὰ βούλεται εἶναι, οὐ κωλύω τὸ κατ' ἐμέ· ἐγὼ δ' ὑπὸ τῆς πόλεως

ἢ τὴν ἐκείνου· πολὺ γὰρ πλείους ἀφορμὰς εἰς τὸ τὴν παρὰ τῶν θεῶν εὔνοιαν ἔχειν ὁρῶ ἡμῖν ἐνοίσας ἢ ἐκείνῳ. ἀλλ', οἶμαι, καθήμεθα, οὐδὲν ποιοῦντες· οὐκ ἐνί δ' αὐτὸν ἀργοῦντα οὐδὲ τοῖς φίλοις ἐπιτάττειν ὑπὲρ αὐτοῦ τι ποιεῖν, μή τί γε δὴ τοῖς θεοῖς. οὐ δὴ θαυμαστόν ἐστιν, εἰ στρατευόμενος καὶ πονῶν ἐκεῖνος αὐτός, καὶ παρὼν ἐφ' ἅπασι, καὶ μηδένα καιρὸν μηδ' ὥραν παραλείπων ἡμῶν μελλόντων καὶ ψηφιζομένων καὶ πυνθανομένων περιγίγνεται.

2. (*a*) In ext. (A), the following various readings occur:—*πάντες ἐθρυλεῖτε ὡς. ἐκπολεμῶσαι δεῖν* Φ. *παρῆσαν ἐπὶ βῆμα.* Comment on them, and point out their differences of meaning. (*b*) *πρὸς Ἀρύββαν*:—State what you know about him. (*c*) Analyse the grammatical structure of ext. (C), from *εὑρίσκω* down to *ἀναδέξασθαι.*

3. (*a*) *δειναὶ συγκρύψαι, φοβερὸν προσπολεμῆσαι*:—Explain the use of the Infinitive. (*b*) *οὐ μὴν ἀλλ' ἐγωγε*:—Explain the force of this expression and supply the ellipsis. (*c*) *ἑλοίμην* * * * *ἢ*:—Why is *μᾶλλον* omitted? (*d*) *θαυμάζω εἰ ἀντήρετε*:—Explain the use of *εἰ* and *ὅτι* to introduce substantival clauses, and show how the former is used in Attic Greek.

4. Write explanatory notes on (1) *οἱ βοησόμενοι.* (2) *εἰσεφέρετε κατὰ συμμορίας.* (3) *μίμους γελοίων.* (4) *πεζέταιροι.* (5) *εὐθυναι ῥᾳδίαι γένωνται.* (*b*) *τοὺς ἐν ἡλικίᾳ.*

5. Parse, pointing out the root of each:—*ἐσκεμμένος, ἐγνωκοτας, ἀφεῖναι, ὑπηργμένων, πεφηνέναι, φήσαι, ηὐξήθη, προῄρηται, συμβῇ, κομιεῖσθε.*

6. Explain the metaphors in:—*ὑποστείλασθαι, πεφενάκικεν, ἀνεχαίτισε, ἠνθησεν, φωρᾶται, καταρρεῖ, συγκεκροτημένοι.*

7. Distinguish between:—(*a*) *οἱ σοφοὶ ἀνθρωποι, σοφοὶ οἱ ἀνθρωποι*, and *οἱ σοφοὶ τῶν ἀνθρώπων.* (Explain the use of the Genitive.) *ὁ οὐ πιστεύων* and *ὁ μὴ πιστεύων. οὐ μὴ ποιήσεις* and *οὐ μὴ ποιήσῃς.* (*b*) *ὁ δεῖνα* and *τὰ δεινά. ἀκρασίαν* and *ἀκρᾱσίαν. λήμματα* and *ἀθλα. κᾰτα* and *κατά. καὶ εἰ* and *εἰ καί. ἐνι, ἐνί*, and *ἑνί.* (*c*) Write more correctly *ἔστ' ὅπως, ἀπ' οἰ, οὐκ ὑμεῖς, πέπλεκμαι, ἐνφανής*, and explain why.

8. A short account of Olynthus, and of the object and effect of these orations. What former possessions of the Athenians in the neighbourhood of Olynthus were at this time in Philip's hands, and why was it important that Athens should interfere in the affairs of Olynthus? What was the end of Demosthenes? An estimate of his character and policy as a statesman.

FIRST YEAR.

LATIN.—VIRGIL.—ÆNEID, BOOK VI.

MONDAY, DECEMBER 14TH:—AFTERNOON, 2 TO 5.

Examiner,..... REV. GEORGE CORNISH, LL.D.

Translate:—

(A)

Excisum Euboicae latus ingens rupis in antrum,
Quo lati ducunt aditus centum, ostia centum;
Unde ruunt totidem voces responsa Sibyllae.
Ventum erat ad limen, cum virgo, Poscere fata
Tempus, ait; deus ecce, deus! Cui talia fanti
Ante fores subito non voltus, non color unus,
Non comptae mansere comae; sed pectus anhelum,
Et rabie fera corda tument; maiorque videri,
Nec mortale sonans, adflata est numine quando
Iam propiore dei. Cessas in vota precesque,
Tros, ait, Aenea? cessas? neque enim ante dehiscent
Attonitae magna ora domus. Et talia fata
Conticuit. Gelidus Teucris per dura cucurrit
Ossa tremor, funditque preces rex pectore ab imo.

(B)

In medio ramos annosaque brachia pandit
Ulmus opaca, ingens, quam sedem Somnia volgo
Vana tenere ferunt, foliisque sub omnibus haerent.
Multaque praeterea variarum monstra ferarum
Centauri in foribus stabulant Scyllaeque biformes
Et centumgeminus Briarens ac belua Lernae,
Horrendum stridens, flammisque armata Chimaera,
Gorgones Harpyiaeque et forma tricorporis umbrae.
Corripit hic subita trepidus formidine ferrum
Aeneas, strictamque aciem venientibus offert,
Et, ni docta comes tenuis sine corpore vitas
Admoneat volitare cava sub imagine formae,
Inruat, et frustra ferro diverberet umbras.

(C)

Sic pater Anchises, atque haec mirantibus addit:
Aspice, ut insignis spoliis Marcellus opimis
Ingreditur, victorque viros supereminet omnis!
Hic rem Romanam, magno turbante tumultu,
Sistet, eques sternet Poenos Gallumque rebellem,
Tertiaque arma patri suspendet capta Quirino.
Atque hic Aeneas; una namque ire videbat
Egregium forma iuvenem et fulgentibus armis,
Sed frons laeta parum, et deiecto lumina voltu:
Quis, pater, ille, virum qui sic comitatur euntem?
Filius, anne aliquis magna de stirpe nepotum?
Qui strepitus circa comitum! quantum instar in ipso!

2. Write short explanatory notes on the following phrases:—(1) Major videri. (2) Cessas in vota? (3) Volgo. (4) Ni admoneat inruat (5) Dejecto lumina voltu. (6) Quantum instar in ipso. (7) Velis ministrat.

3. Explain the historical or mythological references in the following passages:—(*a*) Dardana qui Paridis direxti tela manusque corpus in Aeacidae. (*b*) Scipiadas cladem Libyae. (*c*) Unus qui nobis cunctando restituit rem (From what poet is this verse taken?). (*d*) Tertiaque arma patri suspendet capta Quirino. (*e*) Sedet infelix Theseus. (*f*) Phlegyas miserrimus.

4. Translate, and carefully explain the construction in:—(*a*) Animamque nepotis his saltem adcumulem donis, et fungar inani munere. (*b*) Primam qui legibus urbem fundabit. (*c*) Hujus auspiciis Roma inperium terris animosque aequabit Olympo. (*d*) Lucent genialibus altis aurea fulcra toris. (*e*)Hos juxta falso damnati crimine mortis.

5. Give the force and meaning of the adverbs in the following:—(*a*) Quae sint ea flumina *porro*. (*b*) *Pariter* pietate *vel* armis egregius. (*c*) Silex *jam jam* lapsura. (*d*) Quos *jam inde* ut prospexit. (*e*) Fare *jam istinc*. (*h*) Explain the following forms:—*Divom, volt, olli, aurai.*

b. Parse (giving the first Sing. Present, Perfect, and Future Indicative of each,) the following verbs:—sequere, laetere, passi, miserate, excisum, innexa, obmutuit, excussa, procubuisti, sate.

7. (*a*) Write down the *Nom. Sing.* and *Plu.* of:—Lampada, aurai, sorte aequore, discrimine, caligine. (*b*) Derive:—Bidentis, sutilis, profani, bibulam, brumali, ambages.

8. Describe the geographical situations of:—Lerna, Moeotia tellus, Marpesia cautes, Caietae portum, Minoia regna, Simois, Garamantas, Chalcidica arce (why thus designated?).

9. (*a*) Decline and give the genders of:—*Bos, domus, fucinus, aliquis.* (*b*) Compare:—*Iniquus, gracilis, saepe, breviter.* (*c*) Write down the principal parts (1*st Sing.*) of:—*Promo, tero, parco, posco.* (*d*) What cases severally follow:—*Juvo, consulo, egeo, similis?* Give examples.

10.—Translate into Latin:—1. You and I did it. 2. I am afraid he will come. 3. I was afraid he would not come. 4. A crown of gold was given to the king. 5. The soldier was struck on the head.

SECOND YEAR.

LATIN.—HORACE.—EPISTLES, BOOK I.

MONDAY, DECEMBER 14TH:—AFTERNOON, 2 TO 5.

Examiner.....REV. GEORGE CORNISH, LL.D.

1. Translate:—

(A)

—Quis, circum pagos et circum compita pugnax,
Magna coronari contemnat Olympia, cui spes,

Cui sit condicio dulcis sine pulvere palmae?
Vilius argentum est auro, virtutibus aurum.
"O cives, cives, quaerenda pecunia primum est;
"Virtus post nummos!" Haec Ianus summus ab imo
Perdocet, haec recinunt iuvenes dictata senesque,
Laevo suspensi loculos tabulasque lacerto.
Est animus tibi, sunt mores et lingua fidesque:
Si quadringentis sex septem millia desunt,
Plebs eris. At pueri ludentes: "rex eris," aiunt.
"Si recte facies." Hic murus aëneus esto:
Nil conscire sibi, nulla pallescere culpa.

(B) "Demetri"—puer hic non laeve iussa Philippi
Accipiebat—"abi, quaere et refer, unde domo, quis,
"Cuius fortunae, quo sit patre quove patrono."
It, redit et narrat, Volteium nomine Menam,
Praeconem, tenui censu, sine crimine, notum
Et properare loco et cessare et quaerere et uti,
Gaudentem parvisque sodalibus et lare certo
Et ludis, et post decisa negotia Campo.
"Scitari libet ex ipso quodcunque refers: dic
"Ad coenam veniat." Non sane credere Mena,
Mirari secum tacitus. Quid multa? "Benigne,"
Respondet. "Neget ille mihi? "Negat improbus, et te
Negligit aut horret."

(C) Verum seu pisces seu porrum et caepe trucidas;
Utere Pompeio Grospho, et si quid petet ultro
Defer; nil Grosphus nisi verum orabit et aequum.
Vilis amicorum est annona, bonis ubi quid deest.
Ne tamen ignores, quo sit Romana loco res:
Cantaber Agrippae, Claudi virtute Neronis
Armenius cecidit; ius imperiumque Phraates
Caesaris accepit genibus minor; aurea fruges
Italiae pleno defundit Copia cornu.

(D) Inter cuncta leges et percontabere doctos,
Qua ratione queas traducere leniter aevum;
Num te semper inops agitet vexetque cupido,
Num pavor et rerum mediocriter utilium spes;
Virtutem doctrina paret, naturane donet;
Quid minuat curas, quid te tibi reddat amicum;
Quid pure tranquillet, honos an dulce lucellum:
An secretum iter et fallentis semita vitae.

2. Explain the construction, or the historical (or other) references, in the following:—(*a*) Coronari Olympia. (*b*) Janus summus ab imo perdocet. (*c*) Laevo suspensi loculos lacerto. (*d*) Volteium nomine Menam, praeconem. (*e*) "Benigne," respondet. (*f*) Seu pisces seu porrum et caepe trucidas. (*g*) Caesaris genibus minor. (*h*) Non sane credere Mena.

3. Write short explanatory notes (grammatical) on the following :— (*a*) Fruges *consumere* nati. (*b*) Non tu corpus *eras*. (*c*) Rex paterque *audisti*. (*d*) Reddes *dulce loqui*. (*e*) Scribe *tui gregis*. (*f*) Liber *mihi* non erit unquam. (*g*) Domini *deduxit* febres. (*h*) Bella *tibi* pugnata dicat.

4. Translate and derive the following:—Percontator, solemne, planus, persona, penus, lamna, jugis, catella, catulus, sodes.

5. Parse the following verbs : — Suascrit, collisa, cessatum, torquebere, ignovisse, contuderit, momorderit, arcesse.

6. Explain the use of the oblique cases, naming the case used respectively, in :—(*a*) *Dignis* ait esse paratus. (*b*) Nec *verbo* parcius absens. (*c*) Fortis *causis agendis*. (*d*) Detulerit fasces *indigno* detrahet idem. (*e*) Miscebis sacra *profanis*.

7. Show how the meaning of the following words differs, severally, as their quantity differs :—Edi, incidi, dicant, regere, utere, canis, mane, soles, pendere, oblitus, rege, levis.

8. (*a*) By what cases are the following words respectively followed ? Tempero, piget, consulo, nubo, irascor, aptus, memor, expers, affatim. (*b*) Decline together in the *Sing.* and *Plural*, *hic justior judex*. (*c*) Give the perfect and supine of:—*Cogo*, *alo*, *pello*, *juvo*, *tero*.

9. A short account of Horace and Maecenas.

10. Translate into Latin :—

Thus man obtained the arts of life, but the art of polity he had not ; for it was kept in the house of Zeus, and into the citadel, the dwelling of Zeus, Prometheus was no longer allowed to enter ; moreover, the watchmen of Zeus were terrible. But into the joint abode of Athene and Hephaistus, where they worked together at the craft they loved, he stole unnoticed, and purloining the fiery art of Hephaistus, and the other proper to Athene, bestowed them on man ; and hence man derives abundance for life. But Promethus, for his brother's fault, was visited not long after, as the story goes, by the penalty of his theft.

THIRD YEAR.

LATIN.—JUVENAL.—SATIRES VIII. AND X.

WEDNESDAY, DECEMBER 16TH:—AFTERNOON, 2 TO 5.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Translate :—

(A) Miserum est aliorum incumbere famæ,
Ne collapsa ruant subductis tecta columnis.
Stratus humi palmes viduas desiderat ulmos.
Esto bonus miles, tutor bonus, arbiter idem
Integer ; ambiguæ si quando citabere testis

Incertæque rei, Phalaris licet imperet, ut sis
Falsus, et admoto dictet perjuria tauro,
Summum crede nefas animam præferre pudori
Et propter vitam vivendi perdere causas.
Dignus morte perit, cœnet licet ostrea centum
Gaurana et Cosmi toto mergatur aeno.

(B) Malo pater tibi sit Thersites, dummodo tu sis
Æacidæ similis Vulcaniaque arma capessas,
Quam te Thersitæ similem producat Achilles.
Et tamen, ut longe repetas longeque revolvas
Nomen, ab infami gentem deducis asylo.
Majorum primus quisquis fuit ille tuorum,
Aut pastor fuit aut illud quod dicere nolo.

(C) Temporibus diris igitur jussuque Neronis
Longinum et magnos Senecæ prædivitis hortos
Clausit, et egregias Lateranorum obsidet ædes
Tota cohors : rarus venit in cœnacula miles.
Pauca licet portes argenti vascula puri,
Nocte iter ingressus, gladium contumque timebis
Et motæ ad lunam trepidabis arundinis umbram :
Cantabit vacuus coram latrone viator.
Prima fere vota et cunctis notissima templis
Divitiæ, crescant ut opes, ut maxima toto
Nostra sit arca foro. Sed nulla aconita bibuntur
Fictilibus : tunc illa time, quum pocula sumes
Gemmata et lato Setinum ardebit in auro.

(D) Unus Pellæo juveni non sufficit orbis :
Æstuat infelix angusto limite mundi,
Ut Gyari clausus scopulis parvaque Seripho :
Quum tamen a figulis munitam intraverit urbem,
Sarcophago contentus erit. Mors sola fatetur,
Quantula sint hominum corpuscula. Creditur olim
Velificatus Athos, et quidquid Graecia mendax
Audet in historia ; constratum classibus isdem
Suppositumque rotis solidum mare ; credimus altos
Defecisse amnes epotaque flumina, Medo
Prandente, et madidis cantat quæ Sostratus alis.

2. Give an account explanatory of any four of the following references :— (1) Sacrilegus Verres ; (2) Agamemnonidae ; (3) Arpinas alius; (4) Senecæ prædivitis ; (5) Sapientibus alter ; (6) Principis Caprearum in rupe sedentis ; (7) Atque alius cui fas Ithacum lugere natantem ; (8) Latravit canino rictu uxor.

3. Explain the following constructions :—

(*a*) Stratus *humi* palmes ; (*b*) Pater *tibi sit* Thersites ; (*c*) Ut tamen *et poscas* aliquid ; (*d*) *Repulsa* Sthenebœa nec minus excanduit ; (*e*) Suppositum *rotis* solidum mare ; (*f*) *Tituli* cupido *haesuri saxis cinerum custodibus.*

THIRD AND FOURTH YEARS.

FRICTIONAL ELECTRICITY.

MONDAY, DECEMBER 14 :—AFTERNOON, 2 TO 4.

Examiner,..... D ..... ALEXANDER JOHNSON, LL.D.

1. State the two-fluid theory of electricity. Define positive and negative electricity, and state how you would determine by means of a pith-ball pendulum the character of the electricity on a given charged body.

2. Define induction, and describe the method of exhibiting the phenomena due to it.

3. Describe the plate-machine, and give an account of the action of the several parts.

4. Describe an experiment of Faraday's showing that electricity is distributed on the surface of bodies.

5. By what experiments may it be shown that the tension of electricity differs at different points of a body of an ellipsoidal form.

6. Describe the process of slow discharge for a Leyden jar.

7. Describe the arrangement for piercing a card by means of the Leyden jar and universal discharger.

8. State the rules for the construction of lightning conductors and the reasons for each.

FOURTH YEAR.

MECHANICS.—HYDROSTATICS.—OPTICS.—ASTRONOMY.

MONDAY, DECEMBER 14TH:—MORNING, 9 TO 1.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. Show that the experimental illustration of the "Parallelogram of Forces," given in the text-book will fail, if C′ (the middle weight) be greater than A′ + B′ (the weights on the outside) or less than A′ − B′.

2. In the moveable inclined plane, the Power is to the Pressure on the moveable plane as the height of the plane is to its length.

3. Describe the Burton system of pulleys (of the first kind), and determine the ratio of the Power to the Resistance by the principle of "constancy of work done."

4. Find the time required by a body to fall 200 feet at a place where the length of the seconds pendulum is 39.018 inches.

5. If a body move in a circle whose radius is 17 yards with a velocity of 361 feet per second, calculate the centrifugal force.

6. Describe the method of measuring mountainheights by the Barometer, stating the corrections that must be applied to the observations.

7. Show that the air pump will never make a perfect vacuum, and state how you would calculate the elastic force of the air in the receiver in pounds to the square inch.

8. A cubical block of iron (sp. g. 7.11) is placed in mercury (sp. g. 13.6), find the depth to which it will sink if the side be 1 inch long.

9. Define *deviation*, *dispersion* and *dispersive power* for a prism of any substance, and calculate the dispersive power of crown glass assuming the refractive indices of the red and violet rays to be $\frac{77}{50}$ and $\frac{78}{50}$ respectively, and the refractive index of the glass to be 1.55.

10. Describe the Astronomical Telescope, and find its magnifying power.

11. An equi-convex lens of glass of 10 feet radius is presented toward an object 100 feet distant; find position of image, the refractive index being 1.525.

12. The flame of a candle 2 inches high is placed in front of a concave mirror of 3 feet radius, at a distance of 17 inches from the mirror; find the magnitude and position of the image, and whether inverted or erect.

13. Describe the principle of Halley's method for finding the distance of the Sun by means of the Transit of Venus.

14. Define *apparent* noon, and *mean* noon, and describe how they are to be found at any given place.

15. The latitude of a place is equal to the altitude of the pole.

16. The length of the earth's shadow in space is said to be about 216 times the radius of the earth: how is this to be ascertained?

ENGLISH AND RHETORIC.

FIRST YEAR.

ENGLISH GRAMMAR.

FRIDAY, DECEMBER 18TH:—MORNING, 9 TO 12.

Examiner, ...VEN. ARCHDEACON LEACH, D.C.L.

1. (*a*) Show the difference between abstract and concrete names. (*b*) Are class names abstract or concrete? (*c*) Mention some names that are abstract or concrete, according to the way they are employed.

2. Give examples illustrating the use of "that" as an adjective and as a pronoun.

3. Explain the restricting and the co-ordinating uses of the relative pronouns?

4. Nouns are often used as adjectives; how are they distinguished from true adjectives?

5. Mention any peculiarities worth noting in the use of the numeral adjectives—"both," "many," "some," "all," "no," "none," "every."

6. Enumerate the conjunctions in the first class of the co-ordinating, and mention the classes into which the subordinating are divided.

7. How is the use of different words to denote gender to be accounted for?

8. What are supposed to be the reasons for assigning to inanimate objects genders, masculine and feminine?

9. If such forms as "who do you speak to"; "who for?" are admissible, how is the relative pronoun to be construed?

10. Mention the points of difference between the Past Indefinite and the Present Perfect Tenses.

11. Mention the different periods that have been noted for the introduction of Latin words into the vocabulary of English.

12. Composition of Nouns. Give examples of nouns with adjectives—nouns with verbs—nouns with adverbs—adverb and verb—verb and verb.

13. Give examples of the noun clause, adjective clause, and adverbial clause.

14. State the mode suggested for reconciling grammar and usage in such expressions as "it is me," &c.

15. Give a grammatical analysis of the following sentences—with the notation:"

"All the rest of the day the engineer seemed pre-occupied by some absorbing thought."

"There was nothing to induce any one to covet the cares of office."

"It is no night-fire of the naked hills."

"Having surmounted this obstacle we ran fast."

"if religious tenderness of heart
Grieving for sin and penitential tears
Shed when the clouds had gathered and distained
The spotless ether of a maiden life;
If these may make a hallowed spot of earth
More holy in the sight of God or man,
Then, on that mould a sanctity shall brood
Till the stars sicken at the day of doom."

THIRD YEAR.

RHETORIC.

FRIDAY, DECEMBER 18TH:—AFTERNOON, 2 TO 5.

Examiner.....VEN. ARCHDEACON LEACH, D.C.L.

1. In what significations is the term Rhetoric employed?—and mention the restricted sense adopted by Whately.

2. Give the substance of the critical remarks on the principal writers on the subject.

3. Give an explanation of the different kinds of argument, as divided on different principles.

4. State the rule given for discriminating "a priori" arguments.

5. Give examples of an argument from effect to condition—when the condition is essential and when not so.

6. To what kind of argument does testimony belong?

7. Show the necessity of distinguishing, in testimony, matters of fact and matters of opinion.

8. Give the substance of the remarks on concurrent testimony.

9. Explain what is meant by an improbability in the sense of its having many chances against it.

10. What, according to Whately, is the connecting idea for ranking Induction, Analogy, Parity of Reasoning, &c., under the designation of example?

11. Show why experiment is often conclusive, while other facts are ordinarily the reverse.

12 Give the substance of the remarks on the subject of Analogy.

13. Give an example of the argument from contraries.

14. Mention the cautions and rules given for the use of invented examples.

MENTAL AND MORAL PHILOSOPHY.

SECOND YEAR.

ELEMENTARY PSYCHOLOGY.

FRIDAY, DEC. 18TH:—MORNING, 9 TO 12.

Examiner,.....J. CLARK MURRAY, LL. D.

1. Explain the origin and the meaning of the terms Psychology and Metaphysics.

2. Describe the characteristic which distinguishes mental from other phenomena.

3. Explain the principal terms used for *mind*.

4. Distinguish the different sensations of *sound*.

5. Describe Weber's experiments on the sense of *touch*, and state some of their results.

6. Explain why the sensation of red might not unnaturally be described by a blind man as "like the sound of a trumpet"?

7. Define the terms Representation, Association, and Suggestion.

8. In what circumstances do the Secondary Laws of Suggestion come into play?

9. Explain by the Primary Laws of Suggestion how Shakespere should suggest (*a*) Stratford upon Avon, (*b*) Macbeth.

10. Why should change of scene be recommended to a person suffering from mental anxiety?

11. Explain how study, that is, consecutive as distinguished from rambling thought, is rendered possible by the Secondary Laws of Suggestion.

12. State and criticise Mr. Mill's theory of Selfconsciousness.

THIRD YEAR.

MORAL PHILOSOPHY.

FRIDAY, DEC. 18TH:—MORNING, 9 TO 12.

Examiner,.....J. CLARK MURRAY, LL. D.

1. Explain the object of Moral Philosophy.

2. Distinguish the two aspects in which Moral Philosophy contemplates man.

3. (*a*) What is meant by an *emotion*. (*b*) Explain and criticise the theories on the origin of the emotions.

4. Describe the emotion of *ennui*, and show how it illustrates the theory of pleasure and pain.

5. Distinguish *positive* or *absolute* from *negative* or *relative* pleasures and pains.

6. By what standards is the motive power of a feeling to be measured?

7. (*a*) What are the *appetencies*? (*b*) How are they originated?

8. (*a*) Point out how a natural appetite may acquire artificial intensity. (*b*) How are the artificial appetites acquired?

9. (*a*) How is the desire of happiness formed? (*b*) Explain the other names by which the desire is known.

10. Distinguish the *natural* from the *general* affections.

11. (*a*) What other mental phenomenon besides sympathy is produced by the exhibition of suffering? (*b*) Point out some results of this fact in human life.

12. What is necessary to make an action moral?

13. (*a*) When is an action *absolutely good*; (*b*) when, *relatively good?*

14. (*a*) State the theories on the Freedom of the Will; and (*b*) explain their connection with the theory of responsibility.

FOURTH YEAR.

MENTAL PHILOSOPHY.

FRIDAY, DECEMBER 18TH:—MORNING, 9 TO 12.

Examiner,.....J. CLARK MURRAY, LL.D.

1. (*a*) What is the origin of the term Philosophy? (*b*) What was the sense attached to it by the Socratics? (*c*) Describe the studies now embraced under it?

2. Classify the *sensations*.

3. Distinguish the different sensations of *sound*.

4. Distinguish two classes of Laws of Suggestion.

5. Describe the process by which a simple perception like that of the taste of an apple is formed.

6. Explain the perceptions of the distance and the direction of sounds.

7. (*a*) What is the sole original perception of sight? (*b*) Show that sight cannot by itself perceive distance.

8. Explain psychologically the effect of the stereoscope.

9. Berkeley noticed that in Italy distant objects appeared nearer to him than they were in reality. Explain this illusion.

10. Why do objects in a fog appear larger than they are in reality?

11. By what data do we perceive the direction of visible objects?

12. Describe the mental condition of persons born blind.

MODERN LANGUAGES AND HEBREW.

FIRST YEAR.

FRENCH.

SATURDAY, DEC. 19TH:—MORNING, 9 TO 12.

Examiner,.....P. J. DAREY, M.A., B.C.L.

1. When do you translate the partitive article *some* and *any*, by *du, de la, de l', des, de* or *d'*? Give an example of each case.

2. Write in the plural the following nouns in French, *bolt, owl, work, treat, halter*. State the rules to form those plurals.

Write in the singular, *yeux, voix, aïeux, travaux*, and *chapeaux*.

3. Give the rules to form the feminine of adjectives ending in *x, et, te*. Write the feminine of the French for *singer, author, infirm, twin* and *tired*.

4. What are *possessive adjectives?* What are *possessive pronouns?* Name both the adjectives and the pronouns in the feminine singular, and state the difference between them in French. Give two examples.

5. What is the meaning of *celui* and *ceci?* When are they used? Illustrate your answer by examples.

6. Are the *Imperfect of the Indicative*, the *Future* and the *Imperative*, primitive or derivative tenses? If *primitives*, what tenses do they form; if *derivatives*, from what tenses are they formed, and *how?* Give examples.

7. How do we conjugate a verb *interrogatively* in French, 1st, when the subject is a pronoun; 2nd, when the subject is a noun; 3rd, with certain verbs of one syllable? Give an example of each.

8. Write in full the *Imperative* and the *Imperfect of the Subjunctive* of *être, se promener, recevoir, ne pas se lever.*

9. Translate into French:—

We have in our new house several glazed-doors, and a fine cellar. The partitions, staircase, banister and wainscot are nicely finished. The ceilings are high, the entrance hall wide, and the threshold in white marble.

10. Translate into English:—

Un jour que je l'accompagnais pour aller chez les gens qui gardent l'objet de ses vœux, nous entendîmes, dans une petite maison d'une rue écartée, quelques plaintes mêlées de beaucoup de sanglots. Nous demandons ce que c'est; une femme nous dit, en soupirant, que nous pouvions voir là quelque chose de pitoyable en des personnes étrangères, et qu'à moins d'être insensibles, nous en serions touchés.

MOLIERE, *les Fourberies de Scapin.*

11. When did Molière live? From what Latin author did he take several of the scenes of Fourberies de Scapin. From what piece? What is the best scene, and what is the worst of the Fourberies de Scapin?

12. Translate into French:—

We do not intend to travel this year. That woman nurses herself too much. The Gauls were conquered by Cæsar. Has he not sold again his country-house? Had he lost his pocket-book? Your hens would lay eggs every day. The thermometer has fallen four degrees since yesterday. You ought to behave differently. When he had filled his pockets with pears and apples he went away. They will have been very much pleased and very grateful.

SECOND YEAR.

FRENCH.

SATURDAY, DEC. 19TH:—MORNING, 9 TO 12.

Examiner,.....P. J. DAREY, M.A., B.C.L.

1. What are the historical facts on which Racine has based his tragedy of *Britannicus?* Relate the *dénouement* of that tragedy.

2. Translate into English:—

Vous? Et de quoi, Seigneur, vous inquiétez-vous?
Junie a pu le plaindre et partager ses peines.
Elle n'a vu couler de larmes que les siennes;
Mais aujourd'hui, seigneur, que ses yeux dessillés
Regardant de plus près l'éclat dont vous brillez

Verront autour de vous les rois sans diadème,
Inconnus dans la foule, et son amant lui-même,
Attachés sur vos yeux, s'honorer d'un regard
Que vous aurez sur eux fait tomber au hasard;
Quand elle vous verra, de ce dégré de gloire,
Venir en soupirant avouer sa victoire;
Maître, n'en doutez point, d'un cœur déjà charmé,
Commandez qu'on vous aime, et vous serez aimé.

RACINE, *Britannicus Acte II. Sce. II.*

3. How do you express in French the adjectives of dimension such as *high, wide, thick, deep?* Illustrate your answer by examples.

4. When personal pronouns are the *indirect objets* of the verb, and governed by the preposition *à* understood, how do you express them? And when the preposition is not understood how do you express them? When is the preposition to be expressed? In both cases where do you place the pronouns? Give six examples.

5. When do you write the verb être after *ce*, in the plural? Give two examples.

6. State the rules to write verbs having collective nouns followed by nouns for subjects. Give two examples.

7. State two cases when the verb in French is written in the singular although preceded by two or more nouns. Give two examples.

8. Translate the following verbs with the preposition which they require after them, when they require any: *to be grieved at, to endeavour to, to scold for, to congratulate upon, to delight in, to set about to, to come to, to intend to, to dare to, to stoop to.*

9. Translate into French:—

I *dined* yesterday at my friend's, and last summer, when I was in the country, I *dined* with him several times. Explain fully how that past tense *dined* must be translated into French.

10. State the rule to write the participle past of reflective verbs. Give two examples.

11. What difference is there between *plus* and *davantage; en* and *dans; autour* and *alentour?*

12. Translate into French:—

Man, with corn alone, can feed all the domestic animals that sustain his life, and share his labours; the pig, the hen, the duck, the pigeon, the ass, the sheep, the goat, the cow, the cat, and the dog, which give him, in return, eggs, milk, bacon, wool, services, and gratitude. William III left, at his death, the reputation of a great politician, although he had not been popular, and of a general to be feared, although he had lost many battles. The siege of Azoth lasted 29 years; it is the longest siege mentioned in ancient history. Of all living creatures, man is the only one who has not his face turned towards the earth; he walks with his eyes directed towards heaven, as if to indicate the superiority of his origin.

THIRD YEAR.

FRENCH.

SATURDAY, DEC. 19TH:—MORNING, 9 TO 12.

Examiner,..... ....P. J. DAREY, M.A., B.C.L.

1. Traduisez en anglais:—

Nous atteignîmes ainsi le boulevard Bonne Nouvelle, où l'enfant égaré commença à se reconnaître, malgré la fatigue il pressa le pas; un trouble mêlé d'attendrissement l'agitait; à la vue de sa maison il poussa un cri et courut vers la grille aux pointes dorées; une femme qui attendait sur le seuil, le reçut dans ses bras, et, aux exclamations de joie, au bruit des baisers j'eus bientôt reconnu la mère. ...Bien que grandis, je les reconnus au premier coup d'œil: c'était l'enfant trouvé près du parapet du Louvre et son jeune conducteur. Le costume de ce dernier avait seulement subi d'importantes modifications: sa blouse de toile grise, dont la propreté touchait presque à l'élégance, était serrée à la taille par une ceinture de cuir verni; il était chaussé de forts souliers mais faits à son pied, et coiffé d'une casquette de coutil toute neuve.....L'homme a besoin de fêtes qui détendent son esprit, reposent son corps, épanouissent son âme....Sa veste serrée à la taille était artistement soutachée, un pantalon plissé depuis la ceinture descendait sur des brodequins vernis à boutons de nacre...Ses traits ridés s'étaient épanouis, ses narines se gonflaient; c'était bien, ainsi qu'il l'avait dit lui-même, un festin du regard....Les arbres commencent à déplisser leurs bourgeons

EMILE SOUVESTRE, *Un Philosophe sous les toits.*

2. Comment distingue-t-on *ce* adjectif démonstratif de *ce* pronom démonstratif? Quel est le pluriel de *ce* adjectif et pronom?

3. Que remarquez-vous sur les adjectifs indéfinis *nul*, *certain*, *plusieurs*, *tel?* Illustrez votre réponse par des exemples.

4. Combien y a-t-il d'espèces de compléments? Nommez-les. Dites en quoi ils diffèrent les uns des autres.

5. Ecrivez au pluriel les adjectifs *électoral*, *fatal*, *naval*, *loyal*, *médical*, *labial*, *natal*, *musical*, *pascal* et *verbal*.

6. Traduisez en anglais, et écrivez correctement les vers suivants:—

C'est à regret qu'on voit cet auteur si charmant,
Chez toi toujours cherchant quelque finesse aigu,
Présenter au lecteur sa pensée ambigu.

7. Traduisez en français:—

They returned to their work day after day, and in a short time found a fissure in the rock, which enabled them to pass far with very little obstruction. This Rasselas considered as a good omen. "Do not disturb your mind," said Imlac, "with other hopes or fears than reason may suggest: if you are pleased with prognostics of good, you will be terrified likewise with tokens of evil, and your whole life will be a prey to superstition. Whatever facilitates our work is more than an omen, it is a cause of success. This is one of those pleasing surprises which often happen to active resolution. Many things difficult to design, prove easy to performance."

JOHNSON, *Rasselas.*

JUNIOR CLASS.

GERMAN.

SATURDAY, DECEMBER 19TH:—AFTERNOON, 2 TO 5.

Examiner,.....C. F. A. MARKGRAF, M.A.

1. Translate into English:—

Das frühe Veilchen.

Beim ersten warmen Sonnenstrahl im März schlüpfte ein zartes Veilchen hervor aus seiner schützenden Hülle und freute sich des aufquellenden Lebens. Aber der Schnee lag noch auf den Bergspitzen und in den Schluchten, und ein kalter Abendwind wehte über die Flur, als die Sonne hinunterſank. Da schauderte das Veilchen zusammen und sprach: „Warum muß ich schon sterben, da ich eben zu leben meinte?"

Und der Geist der Blumen, der unsichtbar da stand, antwortete:

„Warum strebteſt du mit deinem zarten Leben so früh in die rauhe Zeit hinaus? Ein schwaches Geschlecht muß untergehen im Frost und Sturm. Wenn du aber nun dein kleines Haupt niederlegſt im Hauche der Nacht, will ich dich in den Schooß deiner Mutter zurückbringen, wo deine Geschwiſter noch schlafen. Frost und Stürme vergehen, doch das Leben verbirgt sich nur und kehrt wieder."

Aloys Schreiber.

2. (*a*) How is the Plural of *masculine* and *neuter* monosyllables formed? Are there any exceptions? (*b*) How is the Plural formed in *feminine* nouns, and what are the exceptions? (*c*) What may be the gender of nouns having the *singular* termination „e", and how do they form their Plural? (*d*) Which nouns take *no* termination in the Plural?

3. Give the Gender and Nominative Plural of:—Land, Sohn, Vetter, Wort, Nacht, Fuchs, Müllerinn, Stoff, Schwester, Jahr, Frau, Laden, Wert;—and the gender and Nominative Singular of:—Sträucher, Kaufleute, Küchen, Lüfte, Augen, Völker, Mäntel, Fräulein, Thüren, Hüte.

4. Give the Nominative and Accusative Singular, and the Nominative Plural of:—the broad stream; that small gold(en) key; her youngest daughter; no green field.

5. Give the meaning and derivation of:—Bäumchen, Röcklein, nächſt, hölzern, steinern, größer, Ländchen, älteſt, Gärtchen, ärmer, gläsern, höher, Körbchen, Knäblein, schärfſter, eisern, Käſtchen, Büchlein.

6. (*a*) In what case is *Time*, when answering the questions: *when?* and *how long?* (*b*) When is *Time* expressed by Zeit; when by mal, and Mal? Give short examples for (*a*) and (*b*).

7. (*a*) Which words may be used as nouns, and what is their gender when thus used? Instance some cases. (*b*) Which numerals are declined like adjectives? (*c*) Express in letters 987, 1345, 6102793.

8. Translate:--I am going—he is coming—we do not speak—do they sing?—may I not play?—they like it—he likes to learn—you ought to read—are you willing to wait?

9. (*a*) Give the 1st and 3rd persons Sing., and the 1st Plural, Present Indicative, of each of the following Perfect Participles:—gegangen, getadelt, verkauft, gebunden, gebracht, gewesen, gearbeitet, geschrieben, gereist. (*b*) Give the usual form of the Imperative in German for:—Hear me! Ask them! Stay here! Come here! Go there! Carry this! Do not say that! Be diligent!

10. Translate into German:—

Who is that man? It is my good father. These ladies are our neighbours. Gold is the dearest and heaviest metal. That poor family lives very contentedly. What *sort of* a place (Ort. m.) is that, and what *kind of* people live there? His new house is not as high as this old *one*. Where is my silver pen? It is here. You are right, and they are wrong. We know your two elder brothers. I know what you are looking for; you have lost your letter, and I have just found it. It is to-day the 19th *of* December, 1874 (in letters.) They have bought six pairs *of* silk gloves, eleven ells *of* black cloth, and three dozens *of* plates and dishes.

SENIOR CLASS.

GERMAN.

MONDAY, DECEMBER 21ST:—AFTERNOON, 1 TO 4.

Examiner.....C. F. A. MARKGRAF, M.A.

I. Ueberſetzen Sie ins Engliſche:—

„Des Sängers Fluch" von Uhland. Seite 123, bis zu Ende.

II. Grammatik.

1. Dekliniren Sie in den 4 Kaſus der Einzahl und Mehrzahl:—Ihr Herr Bruder—diejenige (oder: die) Perſon welche (oder: die)—that powerful monarch—*a* cheerful disposition.

2. *a*. Welches iſt die Form des Imperativs für die zweite Perſon der Einzahl? Geben Sie die Verben an, welche von der allgemeinen Regel abweichen.—*b*. Wie wird der Imperativ in Bezug auf die 3te Perſon der Einzahl und die drei Perſonen der Mehrzahl ausgedrückt? Beleuchten Sie Ihre Antworten auf a und b durch Beiſpiele.

3. Konjugiren Sie, mit Angabe der erſten und dritten Perſon des Singulars und der zweiten des Plurals in allen Modus- und Zeitformen, das reflexive Verb: „ſich empfehlen"

4. *a*. Nähme, bleibeſt, verſchloſſen, hülfe, wirf, ſpönnet, iß, wendeten, ſtürben, lud ein, bewieſe, erfahreſt, göße, griffen an, geſchähe.—Analyſiren

Sie die oben angeführten Verben, und führen Sie dieselben auf ihre Infinitiven zurück. *b.* Entwickeln Sie die unregelmäßigen Formen der folgenden Verben:—Heißen, schwimmen, bitten, ertragen, lesen, genießen, stehen, leiden.

5. Erklären Sie den Gebrauch der Adverbien da und wo in ihrer Zusammenziehung mit Präpositionen, wie z. B. in:—damit, dadurch, darin, woran, wozu, u. s. w.;—und führen Sie kurze Beispiele an.

6. Wir hätten nicht gedacht, daß er jetzt kommen würde.—Es würde mir sehr leid thun, wenn ich ihn nicht zu Hause träfe.—Uebersetzen Sie die obenerwähnten Sätze, und verändern Sie deren Konstruktion *a.* durch Auslassung der Konjunktionen; *b.* durch Inversion der Haupt- und Nebensätze, und die Substituirung des Konjunktivs an die Stelle des Konditionalis.

III. Uebersetzen Sie ins Deutsche:—

Many rivers divide themselves into several branches, before they fall into the sea. The noble prince gave back (the) peace to his country, notwithstanding the great losses which he sustained by it. The host received his guests at the door and led them in. One came in after the other, till the room was quite full. The streets of Leipsic and Frankfort are well known to most merchants. Edward's native town is Vienna; but since his childhood he *has lived* (lives) in Milan. In a month at the latest we shall travel to Spain and Italy. Because he wished for my advice, I told him what I *thought* (held for) the best. If the strong always protected the weak, *there* would not be much war on (the) earth. Every one warned him of the great danger that awaited him.

IV. Literatur.

1. Berichten Sie kurz was Ihnen über die germanisch-gothische Vorzeit bekannt ist. Was läßt sich über den Charakter der frühesten Lieder des heidnischen Germaniens nachweisen, und welche schriftlichen Denkmäler rühren aus dieser Periode her?

2. Warum hat der fränkische Zeitraum in sprachlicher Beziehung eine große Bedeutsamkeit? Durch welche eigenthümliche Form zeichnet sich die altdeutsche Poesie aus? Nennen Sie die beachtungswürdigsten Schriftsteller und die Werke, die uns von ihnen zugekommen sind.

3. Erklären Sie den allmähligen Uebergang des Minnegesangs zum Meistergesang. In wiefern haben die Innungen der Meistersänger zur Ausbildung unserer vaterländischen Sprache beigetragen?

4. Heben Sie die Hauptzüge hervor, die das geistige Leben des deutschen Volkes in der zweiten Epoche der mittelalterlichen Periode kennzeichnen.

JUNIOR CLASS.

HEBREW.

FRIDAY, DECEMBER 18TH:—AFTERNOON, 2 TO 4.30.

Examiner,..... ....REV. A. DE SOLA, LL.D.

1. Give the rules for the Definite Article and Interrogative ה; show wha changes take place in the punctuation of the former, in consequence of the occurrence of gutturals; and explain compensation for Dagesh.

2. Give, with examples, terminations of nouns feminine, in the singular number; and show how the pl. masc., and pl. feminine, also the dual, of nouns, are formed.

3. Write the rules for adjectives in connection with nouns, with examples, in both genders and numbers.

4. Describe *Metheg*, *Rapheh* and *Makkaph*.

5. What is to be observed of the Hebrew accents and their various uses?

6. Write, with examples, the rules for long and short *Kamets* and of *Sheva*, quiescent and syllabical.

7. Describe Dagesh forte and lene; show where they occur, and how they may be distinguished.

8. Show how prepositions and the def. art. are contracted when in conjunction with nouns; give examples in which ם, ל, כ, ב are employed.

9. Show the origin of the Hebrew language; the various claims assigned for its primitive character; some of its main characteristics; and briefly state what has been advanced on the subject of bi-literal roots, and the various periods assigned for the origin of its vowel system.

10. Explain *Pattach* furtive, and *Mappik*.

11. Translate into Hebrew. The voice is the voice of Jacob, but (1) the hands are the hands of Esau. The daughters are my daughters, and the sons are my sons, and to my daughters what shall I do, or to their children. The good man is in the house which is in the field. The large horse and the small mare are with the good man and the good woman.

12, Translate into English:—

האנשים הין בבית הגדול והאשה היתה בשדה · האיש הטוב נתן את הסוס הגדול אל האשה · הבית הקטן בשדה הגדול· האיש הטוב נתן הבית אשר בשדה אל האשה· מן העיר אל השדה ומן השדה אל הבית אשר לאיש:

SENIOR CLASS.

HEBREW.

FRIDAY, DECEMBER 18TH :—AFTERNOON, 2 TO 4.30.

Examiner,..... .....REV. A. DE SOLA, LL.D.

1. Translate literally Psalms, I. II. and III.

2. Analyze in Ps. I. verses 4 and 5 ; in Ps. II. vv. 3, 4 ; in Ps. III. vv. 8 and 9.

3. Write out the verb פקד in the *kal* form.

4 Show how nouns with an immutable vowel in the nominative, form their construct cases; and give the rules for distinguishing the immutable vowels.

5. To the noun גפן, add the pronominal suffixes in both numbers and genders.

6. Write the verb למד in the future *Niphal Piel* and *Hiphil.*

7. Translate literally Genesis I. from vv. 8 to 12.

8. Analyze verses 5, 6, 7.

9. Explain ו conversive and consecutive, and show the effect of its use on the accent.

10. Give the rules for reducing all masculine nouns into three chief classes.

11. Translate into Hebrew :—As the chaff which the wind driveth away is the man whose delight is not in the law of the Eternal, but who walketh in the way of sinners. Many enemies arise against me, but I will not fear the myriads of the wicked who set themselves around me.

12. Translate into English :—

ביום הרביעי עשה אלהים את השמש וזה המאור הגדל לממשלת היום גם עשה את הירח את המאור הקטן לממשלת הל לה ואת הכוכבים עשה אתם למשל ביום ובלילה ולהבדיל בין האור ובין החשך :

CHEMISTRY AND NATURAL SCIENCES.

FIRST YEAR.

ELEMENTARY CHEMISTRY.

FRIDAY, DECEMBER 11TH:—AFTERNOON, 2 TO 5.

Examiner, ...B. J. HARRINGTON, B.A., Ph.D.

1. Explain the relations between the measures of length, volume, and weight, in the metric system.

2. What are the laws regulating the expansion and contraction of gases?

a. A litre of Oxygen is collected at a temperature of 25° C. and pressure of 800 mm. What will the volume become at standard temperature and pressure?

3. Describe a synthetical method of determining the composition of water by weight.

4. What are the allotropic forms in which Carbon exists, and what their respective properties and uses?

5. What are the constituents of the atmosphere, and what their several offices?

6. How is Ethylene prepared, and what is the general formula for the series of Hydrocarbons to which it belongs?

7. What are the properties of the gas produced by the action of dilute Hydric Sulphate upon Zinc?

8. Give the names of the compounds indicated by the following formulæ: H_2O_2, N_2O, CH_4 Ca $(NO_3)_2$, $KHSO_4$. State also the distinction between rational and empirical formulæ.

9. Describe the preparation of Nitric Acid.

10. Explain the changes indicated by the following equations:—

$$(H_4N)Cl + CaO = CaCl_2 + H_2O + (H_3N)_2.$$

$$H_2C_2O_4 + H_2SO_4 = H_2O, H_2SO_4 + CO_2 + CO.$$

SECOND YEAR.

ELEMENTARY BOTANY.

FRIDAY, DECEMBER 11TH:—MORNING, 9 TO 12.

Examiner,.....J. W. DAWSON, LL.D., F.R.S.

1. Explain the terms Primordial Utricle, Nucleus, Protoplasm, as applied to the vegetable cell.

2. Explain the character and arrangement of the tissues in Exogenous stems.

3. State the peculiarities of the stems of Endogens and Acrogens.

4. Explain the normal structure and functions of the Leaf.

5. State the sources of the Carbon of plants, and the chemical changes involved in the production of Mucilage and Cellulose.

6. Describe the appearances of Chlorophyll, Starch and Raphides, as seen under the microscope.

7. Explain the function of the Root in Parasites and Epiphytes.

8. What are the nature and function of Buds, Stipules, Spines.

9. In what manner are cells and vessels strengthened internally, and what distinctive names arise from this.

10. State the nature and function of the Cambium Layer.

THIRD YEAR, AND MIDDLE YEAR IN APPLIED SCIENCE.

ELEMENTARY ZOOLOGY.

FRIDAY, DECEMBER 11TH:—MORNING, 9 TO 12.

Examiner,..... J. W. DAWSON, LL.D., F.R.S.

1. Explain the nature of germinal matter and of the animal cell, and mention some of the principal kinds of cells, with their peculiarities and uses.

2. Describe the Muscular and Osseous tissues, and state their uses.

3. Describe the leading types of the Nervous System.

4. Describe the Typical Vertebra and its principal modifications.

5. Describe the organs of Circulation, and their principal modifications.

6. Explain the use of Homology, Gradation of Rank, and Embryology in classification.

7. Define the Species and Genus in Zoology.

8. State fully the characters of the Provinces Articulata and Radiata.

9. Characterise the Foraminifera and Polycistina, with examples.

10. Explain any two of the following terms :—(a) cilia, (b) pseudopodia, (c) ectosarc, (d) sarcode, (e) cerebellum.

FOURTH YEAR, AND SENIOR YEAR IN APPLIED SCIENCE.

MINERALOGY AND PHYSICAL GEOLOGY (IN PART).

FRIDAY, DECEMBER 11TH:—MORNING, 9 TO 12.

Examiner, ...J. W. DAWSON, LL.D., F.R.S.

1. Describe Quartz, with its principal varieties.

2. State the characters and mode of occurrence of Hornblende; and its principal varieties.

3. Describe Talc, Chlorite, and Serpentine; and state their characteristic differences.

4. State the chemical composition and distinctive characters of Apatite, Gypsum, Galena, and Chalcopyrite.

5. Describe the several ores of Iron, with their differences and modes of occurrence.

6. Given three Crystalline Rocks, composed respectively of Orthoclase, Quartz and Hornblende; of Mica and Quartz; and of Labradorite and Pyroxene: state their probable names, mode of occurrence, and places in the classification.

7. Explain the Hardening and Metamorphism of Rocks.

8. Describe the principal kinds of Markings on Rocks, with their origin.

9. Illustrate the Classes and Orders of Rocks by examples.

10. Explain the nature of Flints in Chalk, of Septaria concretions, and of Silicified wood.

11. Explain the terms Trimetric, Monoclinic, Pseudomorph, Opalescence, with examples.

12. Name the Rocks exhibited, and state what you know as to their origin.

PRACTICAL AND APPLIED SCIENCE.

MIDDLE YEAR.

DRAWING.

THURSDAY, DECEMBER 17TH:—MORNING, 9 TO 12.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

I. Project orthographically on two rectangular planes:—

a. A pentagonal sheet of metal of 3.25 in. side, when resting on one angle, with the surface at 50° to the horizontal, and a line joining the angle on which it rests and the middle of the opposite side at 30° to the vertical.

b. An upright hexagonal prism, 2.18 in. side and 4.75 in. high, a face of which is originally parallel to the vertical plane, when standing on a plane that is inclined at 30° to the horizontal, and turned round one-eighth of a revolution upon an axis parallel to the vertical plane.

2. Project a V-threaded screw, 7.46 in. long, 1.75 in. diameter, and ·3 in. pitch.

3. Develop the surface of a right conic frustrum made by a plane that cuts the axis of the cone, 3.18 in. from the base, at an angle of 15°. The diameter of the base is 4.62 in., and the slant height of the original cone 7.14 in.

4. Show in plan the shape of a section of a square prism, 3.2 in. base, and 3.12 in. high, made by a plane entering at one angle of the top and emerging at the opposite angle of the base, when the solid is tilted at an angle of 25° to the horizontal.

NOTE. Dimensions to be taken on the ½ in. Protractor-scale.

SENIOR YEAR.

DRAWING.

THURSDAY, DECEMBER 17TH:—MORNING, 9 TO 12.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

Project perspectively:—

1. A square pillar, 4 ft. side and 3 ft. high, standing symmetrically upon a square plinth, 7 ft. by 2½ ft. The object is placed 2 ft. within the picture, and one side of the plinth, at a like distance on the observer's right, makes an angle of 30° with the picture plane.

2. A hollow hexagonal cylinder, 2 ft. side, 7 ft. long, and 6 in. thick, when lying symmetrically on one of its long edges 1½ ft. on the left of the observer, and perpendicular to the picture plane.

3. A pyramid, the base of which is a regular octagon of 2 ft. side, and 8 ft. high, when one of its basal angles is 2 ft. within the picture, 8 ft. on the left of the observer, and the sides containing that angle are at 25° and 20° respectively to the picture plane.

4. Two semicircular arches, 4 ft. broad, 1 ft. thick at the crown, and 7 ft. span, supported on piers 2½ ft. thick and 12 ft. high. The object is 3 ft. on the right of the observer, 1 ft. within the picture, and the depth of the arches is parallel to the picture plane.

Scale ½ in. to one foot.

NOTE. The height of the eye is taken at 5 ft. 6 in., and the picture distance as 9 ft.

SENIOR AND MIDDLE YEARS.

CONSTRUCTION.

THURSDAY, DECEMBER 17th:—AFTERNOON, 2 TO 5.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

1. What is steel? and how does its mode of production affect the quality?

2. How are the different kinds of steel distinguished? and to what purposes are they respectively adapted?

3. Explain the effect of *working* upon steel; and point out the importance of Whitworth's improvements in this part of its manufacture.

4. What is the maximum strength of the different varieties of steel? Explain fully the process by which this strength is best attained.

5. Describe the following alloys, and their mechanical application: (*a*) Brass. (*b*) Bronze. (*c*) Babbit's-metal.

6. Upon what natural properties, and general treatment do the strength and durability of timber depend?

7. Explain and illustrate some of the phenomena observed during the seasoning of timber, in reference to its structural peculiarities.

8. What are the appearances of good, and of bad timber respectively?

9. Point out the leading characteristics that distinguish "Pine" from "Leaf-wood."

10. What are the comparative intensities of the resistances that timber offers to the various stress to be supported in structures?

11. Mention some of the best Canadian timbers in the following classes, and point out the different structural uses to which they are adapted: (*a*) Fir. (*b*) Cedar. (*c*) Hickory. (*d*) Elm.

12. Timber is required to be employed for the following purposes.—What kind would you choose for each? and why?

a. The longitudinal timbers of a bridge to carry heavy traffic, and in the construction of which cost is a consideration.

b. The frames of coal-waggons.

c. The platform of a bridge foundation in fresh water.

JUNIOR YEAR.

DRAWING.

SATURDAY, DECEMBER 12TH:—MORNING, 9 TO 12.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

1. Construct a diagonal-scale of inches.

2. Construct geometrically:—

(*a*) An octagon inscribed in a square of 2·78 in. side.

(*b*) The curve of a semi-elliptical arch of 4·92 in. span, and 1·72 in. rise.

(*g*) A triangle equal in area to a regular hexagon of 1·68 in. side.

3. Project orthographically on two rectangular planes:—

(*a*) A square plane of 2·17 in. side; one diagonal being at 45° to the horizontal, and 25° to the vertical plane.

(*b*) A cube of 1·75 in. side standing on a square plane that is inclined at an angle of 35° to the vertical and 30° to the horizontal. Two adjacent edges of the cube make angles of 30° and 60° respectively with the corresponding edges of the inclined plane.

(*g*) A triangular prism 3·75 in. long, having an equilateral base of 2 in. side, when resting on one of its end edges, which makes an angle of 50° with the vertical, and 25° with the horizontal plane.

NOTE.—Neatness and accuracy are essential.

All dimensions to be taken from the Scale in Question (1).

SENIOR YEAR.

(MINING COURSE.)

DRAWING.

THURSDAY, DECEMBER 17TH:—MORNING, 9 TO 12.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

Project isometrically:—

1. Two rectangular blocks of equal thickness lying symmetrically one upon the other The larger block is 4 in. by $2\frac{1}{2}$ in., and the smaller 2 in. by 1 in., and their common thickness is $1\frac{1}{2}$ in.

2. The frustrum of a square pyramid, the ends of which are parallel The sides of the ends are $2\frac{1}{2}$ and 1 in. respectively, and the slant height of the solid is $4\frac{1}{2}$ in.

3. A rectangular prism 4 in. high, $2\frac{1}{2}$ in. wide, and 1 in. thick, penetrated at its centre by a cylinder $3\frac{1}{2}$ in. long, and 1 in. in diameter. The prism stands upright.

4. A panelled door 4 in. high, 2 in. wide, and $\frac{1}{4}$ in. thick, with a semicircular head.

JUNIOR YEAR.

SURVEYING.

SATURDAY, DECEMBER 12TH :—AFTERNOON, 2 TO 5.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

1. What are the principal operations comprised in a Survey?

2. Describe some of the methods employed in raising a perpendicular in the field.

3. In laying out the ground before chaining, what general principles should be adhered to, as regards the shape and size of the geometrical figures employed?

4. Explain and illustrate the manner in which a Field-book is kept.

5. An obstacle that can be seen over, but can neither be chained round nor across, is met with. How would you ascertain its width, and continue the chaining?

6. Plot to a 2-chain scale, and compute the area, of the Survey contained in the accompanying Field-notes.

MIDDLE YEAR.

LEVELLING.

FRIDAY, DECEMBER 18TH :—MORNING, 9 TO 12.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

1. What constitutes the art of levelling?

2. Explain how atmospheric refraction affects levelling operations.

3. State what are the chief elements in the determination of the difference in altitude of two stations by the Barometer; and why.

4. How, and to what extent, are angles of elevation and depression, taken with the Theodolite, affected by the figure of the Earth?

5. Describe some of the more common forms of the Spirit-Level.

6. Explain by an example the method of keeping a Level-book, in which the height of the axis of the instrument above Datum is the principal feature.

SENIOR YEAR.

MENSURATION AND APPLIED MECHANICS.

FRIDAY, DECEMBER 18TH :—MORNING, 9 TO 12.

Examiner,.....G. F. Armstrong, M.A., C.E.

1. Explain, and illustrate by an example, the fundamental proposition on which all rules of mensuration are based.

A certain ship, 200 ft. long, is found to have 1800 tons displacement (or actual weight.) What will be the displacement of a similar vessel, 300 ft long?

2. Shew how to determine the area of the segment of an ellipse.

The axes of an ellipse are 25 and 35; what is the area of an elliptic segment cut off parallel to the shorter axis, the height being 10 ft.?

3. Deduce the volume of the sphere from that of a right cylinder.

Assuming the diameter of the earth to be 8000 miles, and that Geologists know something of the interior to a depth of 5 miles below the surface; what fraction of the whole content is known?

4. Shew how to determine the surface of a right cone.

What is the angle of slope of a cone that develops into a semicircle?

5. Define what is meant by the "Efficiency of an Agent," and by the "Modulus of a Machine." Illustrate your answer by examples.

A locomotive draws, at the rate of 25 miles an hour, a gross load of 80 tons; and the resistances are 9 lbs. per ton. What must be the least H.P. of the engine?

6. Explain what relationship exists between the quantity of water evaporated and the work of steam; also why it is more economical to work at high, than at low, pressure.

The length of stroke of a condensing engine is 8 ft., the pressure of the steam in the cylinder is 48 lbs., the diameter of the piston is 36 in., the elasticity of vapour in condenser is 4 lbs., and the steam is cut off at 2 ft. of the stroke.—How much work is done during one stroke?

7. Upon what considerations does the equilibrium of walls rest? and what functions do buttresses perform, with regard to the stability of structures?

A roof of 60° pitch, weighs 20 lbs. per square foot, and there is 6 feet between the main rafters supporting it. The walls built of brick (sp. gy. 2·158) that carry the roof, are 30 ft. apart, 20 ft. high, and 3 ft. thick. Are they strong enough to resist the thrust?

8. Determine the relation between Velocity acquired, and Space passed over by a Falling Body.

The crank-shaft of an engine makes 200 revolutions per minute. The crank itself is 12 in. in length, and the piston, which has an area of 113 sq. in., together with its connected parts, weighs 470 lbs. This mass necessarily comes to rest at the end of each stroke, and must be started again on its return; and it may either be dragged on by the rotating shaft and fly-wheel, or be moved by the pressure of the entering steam. Find, approximately, what must be the pressure of the steam, in order that the piston may begin to move without straining the crank pin.

NOTE. The example in Question 7 is to be solved by the Graphic Method.

SESSIONAL EXAMINATIONS, 1875.

CLASSICS.

FIRST YEAR.

GREEK.—HOMER.—ILIAD, BOOK VI.

THURSDAY, APRIL 1ST :—MORNING, 9 TO 12.

Examiner.....REV. GEORGE CORNISH, LL.D.

1. Translate :—

(A) "Ως ἐφαθ', Ἕκτωρ δ' οὔτι κασιγνήτῳ ἀπίθησεν.
αὐτίκα δ' ἐξ ὀχέων σὺν τεύχεσιν ἄλτο χαμᾶζε,
πάλλων δ' ὀξέα δοῦρα κατὰ στρατὸν ᾧχετο πάντη,
ὀτρύνων μαχέσασθαι, ἐγειρε δὲ φύλοπιν αἰνήν.
οἱ δ' ἐλελίχθησαν καὶ ἐναντίοι ἔσταν Ἀχαιῶν·
Ἀργεῖοι δ' ὑπεχώρησαν, λῆξαν δὲ φόνοιο,
φὰν δέ τιν' ἀθανάτων οὐρανοῦ ἀστερόεντος
Τρωσὶν ἀλεξήσοντα κατελθέμεν· ὣς ἐλέλιχθεν.
Ἕκτωρ δὲ Τρώεσσιν ἐκέκλετο μακρὸν ἀύσας
„Τρῶες ὑπέρθυμοι τηλεκλειτοί τ' ἐπίκουροι,
ἀνέρες ἐστε, φίλοι, μνήσασθε δὲ θούριδος ἀλκῆς,
ὄφρ' ἂν ἐγὼ βείω προτὶ Ἴλιον ἠδὲ γέροντσιν
εἶπω βουλευτῆσι καὶ ἠμετέρῃς ἀλόχοισιν
δαίμοσιν ἀρήσασθαι, ὑποσχέσθαι δ' ἑκατόμβας."

(B) „Δᾶερ ἐμεῖο, κυνὸς κακομηχάνου, ὀκρυοέσσης,
ὡς μ' ὄφελ' ἤματι τῷ ὅτε με πρῶτον τέκε μήτηρ
οἴχεσθαι προφέρουσα κακὴ ἀνέμοιο θύελλα
εἰς ὄρος ἢ εἰς κῦμα πολυφλοίσβοιο θαλάσσης,
ἔνθα με κῦμ' ἀπόερσε πάρος τάδε ἔργα γενέσθαι.
αὐτὰρ ἐπεὶ τάδε γ' ὧδε θεοὶ κακὰ τεκμήραντο,
ἀνδρὸς ἔπειτ' ὤφελλον ἀμείνονος εἶναι ἀκοιτις,
ὃς ἤδη νέμεσίν τε καὶ αἴσχεα πόλλ' ἀνθρώπων.
τούτῳ δ' οὔτ' ἂρ νῦν φρένες ἔμπεδοι οὔτ' ἂρ' ὀπίσσω
ἔσσονται· τῷ καί μιν ἐπαυρήσεσθαι ὀΐω.
ἀλλ' ἄγε νῦν εἰσελθε καὶ ἕζεο τῷδ' ἐπὶ δίφρῳ,
δᾶερ, ἐπεί σε μάλιστα πόνος φρένας ἀμφιβέβηκεν
εἵνεκ' ἐμεῖο κυνὸς καὶ Ἀλεξάνδρου ἕνεκ' ἄτης,
οἷσιν ἐπὶ Ζεὺς θῆκε κακὸν μόρον, ὡς καὶ ὀπίσσω
ἀνθρώποισι πελώμεθ' ἀοίδιμοι ἐσσομένοισιν."

(C) Οὐδὲ Πάρις δήθυνεν ἐν ὑψηλοῖσι δόμοισιν,
ἀλλ' ὅγ', ἐπεὶ κατέδυ κλυτὰ τεύχεα, ποικίλα χαλκῷ,
σεύατ' ἔπειτ' ἀνὰ ἄστυ, ποσὶ κραιπνοῖσι πεποιθώς.
ὡς δ' ὅτε τις στατὸς ἵππος, ἀκοστήσας ἐπὶ φάτνῃ,
δεσμὸν ἀπορρήξας θείῃ πεδίοιο κροαίνων,
εἰωθὼς λούεσθαι ἐϋρρεῖος ποταμοῖο,
κυδιόων· ὑψοῦ δὲ κάρη ἔχει, ἀμφὶ δὲ χαῖται
ὦμοις ἀΐσσονται· ὁ δ' ἀγλαΐηφι πεποιθώς,
ῥίμφα ἑ γοῦνα φέρει μετά τ' ἤθεα καὶ νομὸν ἵππων·
ὣς υἱὸς Πριάμοιο Πάρις κατὰ Περγάμου ἄκρης,
τεύχεσι παμφαίνων ὥστ' ἠλέκτωρ, ἐβεβήκει
καγχαλόων, ταχέες δὲ πόδες φέρον. αἶψα δ' ἔπειτα
Ἕκτορα δῖον ἔτετμεν ἀδελφεὸν, εὖτ' ἄρ' ἔμελλεν
στρέψεσθ' ἐκ χώρης, ὅθι ἡ ὁάριζε γυναικί.

2. Explain the grammatical construction of:—(*a*) *ἐναντίοι ἔσταν Ἀχαιῶν.* (*b*) *φάν τιν' ἀθανάτων Τρωσὶν ἀλεξήσοντα κατελθέμεν.* (*c*) *ὣς μ' ὄφελ' ἤματι τῷ * * * οἰχέσθαι προφέρουσα κακὴ ἀνέμοιο θύελλα.* (*d*) *θείῃ πεδίοιο κροαίνων.* (*e*) *λούεσθαι ἐϋρρεῖος ποταμοῖο.*

3. Parse the following verbs, giving their principal parts:—*ἅλτο, ἔσταν, λῆξαν, φάν, ἐλίλιχθεν, βείω, τέκε, ἀπόερσε, ἤδη, ἔζεο.* Point out peculiarities in any, and give Attic equivalents of such as are Epic forms.

4. Parse the following, and write down the *Nom. Sing.* and *Plu.* of each:—*ὀχέων, δοῦρα, γέρουσιν, ἡμετέρῃς, ἤματι, ἀνέμοιο, ἐϋρρεῖος, κάρη, ἀγλαΐηφι, ὀίεσσιν.*

5. Write short explanatory notes on:—*ἑκατόμβοια, ἀμφικύπελλον, ξεινήια, ζωστῆρα, χαλκός, πάμποικιλα, Σκαιάς, φάλος.*

6. Derive the following, and give cognate forms in Latin and English of any you know:—*πέπον, λάξ, ἠνις, δέρμα, δᾶερ, ἠλέκτωρ, ἄμμορον, νηπίαχον, λώιον, αἰθοπα.*

7. Distinguish between:—*οὗτα* and *οὖτα. τηλεκλειτοὶ* and *τηλέκλητοι. ἡ πόσις* and *ὁ πόσις. ἀνα* and *ἀνά. ἤδη* and *ἤδη. κράτος* and *κρατός. ἢ* and *ἡ* and *ἤ* and *ἡ. ἀγαθὸς ὁ παῖς* and *ὁ ἀγαθὸς παῖς. ὁ παῖς αὐτὸς* and *ὁ αὐτὸς παῖς.*

8. (*a*) Write down the Attic equivalents of:—*ὄθι, εὖτε, ἐπήν, κέν, ἀμόν, ἠνν.* (*b*) Decline:—*κόρυς, νηίς, μήτηρ, ἄναξ, ἥρως.* (*c*) Compare:—*μάλα, ἀγχι, ταχύ, πρέσβυς, καλός, ἡδύς.* (*d*) Write down the *Pres. Indic.*, in all the numbers, of *εἶμι, εἰμί,* and *ἴημι.*

9. (*a*) Define and illustrate by examples, what is meant by *Tmesis, Anastrophe, Zeugma, Arsis, Thesis.* (*b*) Name the metre of the Iliad and write down the scale. (*c*) Scan the first three vss. of ext. (B).

10. A short account of the birth-place, life and poetry of Homer.

INTERMEDIATE EXAMINATION.

GREEK.—LYSIAS. } CONTRA ERATOSTHENEM.
ORATIO FUNEBRIS.

THURSDAY, APRIL 1ST :—MORNING, 9 TO 12.

Examiners..... } REV. GEORGE CORNISH, LL.D.
REV. GEORGE WEIR, M.A.

1. Translate:—

(A) Ἀμαζόνες γὰρ Ἄρεως μὲν τὸ παλαιὸν ἦσαν θυγατέρες, οἰκοῦσαι δὲ παρὰ τὸν Θερμώδοντα ποταμόν, μόναι μὲν ὡπλισμέναι σιδήρῳ τῶν περὶ αὐτάς, πρῶται δὲ τῶν πάντων ἐφ' ἵππους ἀναβᾶσαι, οἷς ἀνελπίστως δι ἀπειρίαν τῶν ἐναντίων ἦρουν μὲν τοὺς φεύγοντας, ἀπέλειπον δὲ τοὺς διώκοντας ἐνομίζοντο δὲ διὰ τὴν εὐψυχίαν μᾶλλον ἀνδρες ἢ διὰ τὴν φύσιν γυναῖκες· πλέον γὰρ ἐδόκουν τῶν ἀνδρῶν ταῖς ψυχαῖς διαφέρειν ἢ ταῖς ἰδέαις ἐλλείπειν. ἀρχουσαι δὲ πολλῶν ἐθνῶν, καὶ ἔργῳ μὲν τοὺς περὶ αὐτὰς καταδεδουλωμέναι, λόγῳ δὲ περὶ τῆσδε τῆς χώρας ἀκούουσαι κλέος μέγα, πολλῆς δόξης καὶ μεγάλης ἐλπίδος χάριν παραλαβοῦσαι τὰ μαχιμώτατα τῶν ἐθνῶν ἐστράτευσαν ἐπὶ τήνδε τὴν πόλιν.

(B) Ὑστέρῳ δὲ χρόνῳ Ἑλληνικοῦ πολέμου καταστάντος διὰ ζῆλον τῶν γηγενημένων καὶ φθόνον τῶν πεπραγμένων, μέγα μὲν ἅπαντες φρονοῦντες, μικρῶν δ' ἐγκλημάτων ἕκαστοι δεόμενοι, ναυμαχίας Ἀθηναίοις πρὸς Αἰγινήτας καὶ τοὺς ἐκείνων συμμάχους γενομένης ἑβδομήκοντα τριήρεις αὐτῶν ἐλάμβανον. πολιορκούντων δὲ κατὰ τὸν αὐτὸν χρόνον Αἰγυπτόν τε καὶ Αἴγιναν, καὶ τῆς ἡλικίας ἀπούσης ἔν τε ταῖς ναυσὶ καὶ ἐν τῷ πεζῷ στρατεύματι, Κορίνθιοι καὶ οἱ ἐκείνων σύμμαχοι, ἡγούμενοι ἢ εἰς ἐρημον τὴν χώραν ἐμβαλεῖν ἢ ἐξ Αἰγίνης ἀξειν τὸ στρατόπεδον, ἐξελθόντες πανδημεὶ Γεράνειαν κατέλαβον· Ἀθηναῖοι δὲ τῶν μὲν ἀπόντων, τῶν δ' ἐγγὺς ὄντων, οὐδένα ἐτόλμησαν μεταπέμψασθαι· ταῖς δ' αὐτῶν ψυχαῖς πιστεύσαντες καὶ τῶν ἐπιόντων καταφρονήσαντες οἱ γεραίτεροι καὶ οἱ τῆς ἡλικίας ἐντὸς γεγονότες ἠξίουν αὐτοὶ μόνοι τὸν κίνδυνον ποιήσασθαι, οἱ μὲν ἐμπειρίᾳ τὴν ἀρετήν, οἱ δὲ φύσει κεκτημένοι.

(C) Εἶτ', ὦ σχετλιώτατε πάντων, ἀντέλεγες μὲν ἵνα σώσειας, συνελάμβανες δὲ ἵνα ἀποκτείναις; καὶ ὅτε μὲν τὸ πλῆθος ἦν ὑμῶν κύριον τῆς σωτηρίας τῆς ἡμετέρας, ἀντιλέγειν φῂς τοῖς βουλομένοις ἡμᾶς ἀπολέσαι, ἐπειδὴ δὲ ἐπὶ σοὶ μόνῳ ἐγένετο καὶ σῶσαι Πολέμαρχον καὶ μή, εἰς τὸ δεσμωτήριον ἀπήγαγες; εἶθ' ὅτι μέν, ὡς φῄς, ἀντειπὼν οὐδὲν ὠφέλησας, ἀξιοῖς χρηστὸς νομίζεσθαι, ὅτι δὲ συλλαβὼν ἀπέκτεινας, οὐκ οἴει ἐμοὶ καὶ τουτοισὶ δοῦναι δίκην; Καὶ μὴν οὐδὲ τοῦτο εἰκὸς αὐτῷ πιστεύειν, εἴπερ ἀληθῆ λέγει φάσκων ἀντειπεῖν, ὡς αὐτῷ προσετάχθη. οὐ γὰρ δή που ἐν τοῖς μετοίκοις πίστιν παρ' αὐτοῦ ἐλάμβανον.

(D) Πολλῶν δὲ καὶ μεγάλων κινδύνων ὑπαρξάντων ἀνδρες ἀγαθοὶ γενόμενοι τοὺς μὲν ἐλευθερώσατε, τοὺς δ' εἰς τὴν πατρίδα κατηγάγετε. εἰ δὲ ἐδυστυχήσατε καὶ τούτων ἡμάρτετε, αὐτοὶ μὲν ἂν δείσαντες ἐφεύγετε μὴ πάθητε τοιαῦτα οἷα καὶ πρότερον, καὶ οὔτ' ἂν ἱερὰ οὔτε βωμοὶ ὑμᾶς ἀδικουμένους διὰ τοὺς τούτων τρόπους ὠφέλησαν, ἃ καὶ τοῖς ἀδικοῦσι σωτήρια γίνεται· οἱ δὲ παῖδες ὑμῶν, ὅσοι μὲν ἐνθάδε ἦσαν, ὑπὸ τούτων ἂν ὑβρίζοντο, οἱ δ' ἐπὶ ξένης μικρῶν ἂν ἕνεκα συμβολαίων ἐδούλευον ἐρημίᾳ τῶν ἐπικουρησόντων.

2. Explain carefully the grammatical construction of:—(*a*) *πλέον γὰρ ἐδόκουν τῶν ἀνδρῶν ταῖς ψυχαῖς διαφέρειν ἢ ταῖς ἰδέαις ἐλλείπειν.* (*b*) *τῶν πεπραγμένων—μικρῶν ἐγκλημάτων—ναυμαχίας γενομένης.* (*c*) *οὐκ ἀρξασθαί μοι δοκεῖ ἄπορον εἶναι τῆς κατηγορίας, ἀλλὰ παύσασθαι λέγοντι.* (*d*) *ἐως ἂν θανάτου δόξῃ τῷ φύγοντι ἄξια εἰργάσθαι.*

3. (*a*) Explain the mythical and historical references of extt. (A) and (B), giving the dates of the latter. What was the period of the Athenian Supremacy in the affairs of Greece? (*b*) Define the geographical situation of Thermodon, Geranea, Aegina, Phyle, Piræus.

4. Write explanatory notes on:—(1) *καὶ οὐδενὶ πώποτε οὔτε ἡμεῖς οὔτε ἐκεῖνος δίκην οὔτε ἐδικασάμεθα οὔτε ἐφύγομεν.* (2) *μέτοικοι.* (3) *τάλαντον ἀργυρίου.* (4) *κυζικηνός.* (5) *Δαρεικός.* (6) *ἐφοδία.* (7) *πάσας τὰς χορηγίας χορηγησάντας.* (8) *τριηραρχήσαντες.* (9) *προβούλων.*

5. Parse the following words, and give the composition or the derivation if any, and the principal tenses, of the verbs:—(1) *ἐμβαλεῖν.* (2) *γεραίτεροι.* (3) *γεγονότες.* (4) *ἠξίωνν.* (5) *κρείττους.* (6) *γνωμιξίν.* (7) *σώσειας.* (8) *ἀπολέσαι.* (9) *ἀπήγαγες.* (10) *δοῦναι.* (11) *προσετάχθη.* (12) *νίεῖς.*

6. (*a*) What parts of verbs in ω are exceptionally accented? (*b*) Distinguish between:—*ἀριστεῖα* and *ἀριστεία*. *ναναγίων* and *ναναγιῶν*. *σωτήρια* and *σωτηρία*. *εἰς ἐρημον τὴν χώραν* and *εἰς τὴν ἐρημον χώραν*. *ζῆλος* and *φθόνος*.

7. (*a*) On what grounds has the genuineness of the *Oratio Funebris* been questioned? What speech of what other orator bears a striking resemblance to it? (*b*) On what occasions were such orations as this made, and where were they delivered at Athens? (*c*) Name others of the same character.

8. Name, with dates, the chief of the *Decem Attici Oratores*. What place did Lysias occupy among them? What circumstances were favourable to the cultivation of oratory at Athens in contrast to other Greek states?

9. A sketch of the life of Lysias. What was the political and social position of his family and himself at Athens? How many speeches is he said to have written? How many are extant? How many were spoken by himself?

10. The date and attendant circumstances of the delivery of the speech *Contra Eratosthenem*. State what you know of the Court before which it was spoken, in respect of its composition and functions.

THIRD YEAR.

GREEK.—ÆSCHYLUS.—SEVEN AGAINST THEBES.

TUESDAY, APRIL 6TH :—MORNING, 9 TO 12.

Examiner.....REV. GEORGE CORNISH, LL.D.

1. Translate :—

(A)

ἑπτὰ δ' ἀγάνορες πρέποντες στρατοῦ
ὁρυσσόοις σάγαις πύλαις ἑβδόμαις
προσίστανται πάλῳ λαχόντες.
σύ τ' ὦ Διογενὲς φιλόμαχον κράτος,
ῥυσίπολις γενοῦ, Παλλὰς, ὅ θ' ἵππιος
ποντομέδων ἄναξ,
ἰχθυβόλῳ μαχανᾷ Ποσειδᾶν
ἐπίλυσιν φόβων ἐπίλυσιν δίδου.
σύ τ' Ἄρης, φεῦ φεῦ, Κάδμου ἐπώνυμον
πόλιν φύλαξον, κήδεσαί τ' ἐναργῶς.
καὶ Κύπρις, ἀτ' εἰ γένους προμάτωρ,
ἄλευσον. σέθεν γὰρ ἐξ αἵματος
γεγόναμεν· λιταῖσί σε θεοκλύτοις
ἀπύουσαι πελαζόμεσθα.
καὶ σὺ, Λύκει' ἄναξ, Λύκειος γενοῦ
στρατῷ δαίῳ, στόνων καππαίτας·
σύ τ' ὦ Λατογένεια κούρα,
τόξον εὐτυκάζου,
Ἄρτεμι φίλα, ἓ ἑ.
ὄτοβον ἁρμάτων ἀμφὶ πόλιν κλύω.

(B)

ΧΟ. καὶ μὴν ὀκούω γ' ἱππικῶν φρυαγμάτων.
ΕΤ. μή νυν ἀκούουσ' ἐμφανῶς ἄκου ἀγαν.
ΧΟ. στένει πόλισμα γῆθεν, ὡς κυκλουμένων.
ΕΤ. οὐκοῦν ἐμ' ἀρκεῖ τῶνδε βουλεύειν πέρι;
ΧΟ. δέδοικ', ἀραγμὸς δ' ἐν πύλαις ὑφέλλεται.
ΕΤ. οὐ σῖγα μηδὲν τῶνδ' ἐρεῖς κατὰ πτόλιν;
ΧΟ. ὦ ξυντέλεια, μὴ προδῷς πυργώματα.
ΕΤ. οὐκ ἐς φθόρον σιγῶσ' ἀνασχήσει τάδε;
ΧΟ. θεοὶ πολῖται, μή με δουλείας τυχεῖν.
ΕΤ. αὐτὴ σὺ δουλοῖς καὶ σὲ καὶ πᾶσαν πόλιν.
ΧΟ. ὦ παγκρατὲς Ζεῦ, τρέψον εἰς ἐχθροὺς βέλος.
ΕΤ. ὦ Ζεῦ, γυναικῶν οἷον ὤπασας γένος.
ΧΟ. μοχθηρὸν, ὥσπερ ἄνδρας ὢν ἁλῷ πόλις.
ΕΤ. παλινστομεῖς αὖ θιγγάνουσ' ἀγαλμάτων;
ΧΟ. ἀψυχίᾳ γὰρ γλῶσσαν ἁρπάζει φόβος.
ΕΤ. αἰτουμένῳ μοι κοῦφον εἰ δοίης τέλος.
ΧΟ. λέγοις ἂν ὡς τάχιστα, καὶ τάχ' εἴσομαι.
ΕΤ. σίγησον, ὦ τάλαινα, μὴ φίλους φόβει.
ΧΟ. σιγῶ· σὺν ἄλλοις πείσομαι τὸ μόρσιμον.

(C) ET. *φεῦ τοῦ ξυναλλάσσοντος ὀρνιθος ὀρωτοῖς*
δίκαιον ἀνδρα τοῖσι δυσσεβεστέροις.
ἐν παντὶ πράγει δ' ἔσθ' ὁμιλίας κακῆς
κάκιον οὐδὲν, καρπὸς οὐ κομιστέος.
ἀτης ἄρουρα θάνατον ἐκκαρπίζεται·
ἡ γὰρ ξυνεισβὰς πλοῖον εὐσεβὴς ἀνὴρ
ναύταισι θερμοῖς καὶ πανουργίᾳ τινὶ
ὄλωλεν ἀνδρῶν σὺν θεοπτύστῳ γένει·
ἡ ξὺν πολίταις ἀνδράσιν δίκαιος ὢν
ἐχθροξένοις τε καὶ θεῶν ἀμνήμοσι
ταὐτοῦ κυρήσας ἐκδίκως ἀγρεύματος,
πληγεὶς θεοῦ μάστιγι παγκοίνῳ 'δάμη·
οὗτος δ' ὁ μάντις, υἱὸν Οἰκλέους λέγω,
σώφρων δίκαιος ἀγαθὸς εὐσεβὴς ἀνὴρ,
μέγας προφήτης, ἀνοσίοισι συμμιγεὶς
θρασυστόμοισιν ἀνδράσιν βίᾳ φρενῶν
τείνουσι πομπὴν, τὴν μακρὰν πόλιν μολεῖν,
Διὸς θέλοντος ξυγκαθελκυσθήσεται.

2. Write explanatory notes on the following expressions occurring in the above extt.:—(1) *πύλαις ἑβδόμαις.* (2) *ἵππιος ἀναξ.* (3) *Λύκειος.* (4) What is said to have been the personal and political reference of ext. (C). (5) How does Dindorf deal with part of vs. 4 and vs. 5, and also vs. 17, of the same ext., and on what grounds?

3. Explain the construction of:—(*a*) *ὧν Ζεὺς ἀλεξητήριος ἐπώνυμος πόλει.* (*b*) *λεόντων ὡς Ἄρη δεδορκότων.* (*c*) *ἀκμάζει βρετέων ἔχεσθαι.* (*d*) *τί πόλις ἀμμι πάσχει;* (*e*) *ἄροισθε κῦδος τοῖσδε πολίταις.* (*f*) *ἅλω πολλὴν ἐφριξα δινήσαντος.*

4. State carefully the meaning of the following expressions:—(1) *ὑμνοῖτο φροιμίοις πολυρρόθοις.* (2) *πυρὸς δίχα.* (3) *προσβολὴν νυκτηρεῖσθαι.* (4) *πέπλων καὶ στεφέων ἀμφὶ λιτάν' ἑξομεν.* (Illustrate from the Iliad.) (5) *ἀκροβόλων ἐπαλξέων λιθὰς ἔρχεται.* (6) *τροφεῖα πληρώσει χθονί.* (7) *οὐ καπηλείσειν μάχην.* (8) *φιμοὶ συρίζουσι.*

5. Name the dialect of the following, severally, and account for their use:—*ἐργμάτων, ὁλοίατο, γᾶς, λευστῆρα, ἄμμι, λεώς, ναός, σοῦσδε, πρᾶγος, εὐτε.*

6. Parse the following Verbs, noting any peculiarities:—*τελεῖ, ληφθῶ, κρημναμενᾶν, ἁλᾷ, ἀροῖσθε, πιανῶ, ἠναίροντο, κεκλήσει, μολεῖν, ἐσθορεῖν, ἠρθην, ἔλακον, ποτᾶται, τάγευσαι.*

7. Derive, and give the meaning of:—*ἑτεροβάγμονι, καππαύτας, γενῦν, ἐπακτόν, κλητῆρα, ἐκκρουστων, κύτος, ἔξηβον, βλαχαί.* Give cognate forms in Latin and English.

8. Comment on the following *various readings*, and distinguish between them:—(2) *τόξον—εὐτυκάζου—ἐντυκάζου—εὖ πυκάζου.* (2) *ἑτεροβαγμονι—ἑτεροφώνᾳ—στρατᾷ.* (3) *μαντις—ἡ 'ννοία τινί.—ἐννοίᾳ τινί.—ἡ ἀνοία τινί.* (4) *λαπάξειν ἄστυ βίᾳ δορός·—Διὸς·*

9. (*a*) Distinguish between the meaning of:—*σύμφορα* and *συμφορά*. *θάρσος* and *θράσος*. *δουλοῖς* and *δούλοις*. *γέγωνα* and *γεγωνά*. *ἔργμα* and *ἕργμα*. *ἀρα* and *ἄρα* and *ἀρά*. *τἀν* and *τὰν*. *ἀνα* and *ἀνά*. (*b*) Scan the following vss., and point out any metrical peculiarities:—

Παρθενοπαῖος Ἀρκάς· ὁ δὲ τοιόσδ' ἀνήρ.
Ἱππομέδοντος σχῆμα καὶ μέγας τύπος.
Μεγαρεύς, Κρέοντος σπέρμα, τοῦ Σπαρτῶν γένους.
Ὅστις φυλάσσει πρᾶγος ἐν πρώμνῃ πόλεως.

(*c*) Write down the scale of the *Iambic Senarius*.

10. A short account of the life and times of Æschylus. (*b*) Note the leading characteristics of his style and treatment of subjects.

B.A. ORDINARY EXAMINATION.

TUESDAY, APRIL 6TH:—MORNING, 9 TO 12.

GREEK.—{ SOPHOCLES.—ELECTRA. / DEMOSTHENES.—OLYNTHIACS.

Examiner..... REV. GEORGE CORNISH, LL.D.

1. Translate:—

(A)
ΗΛ. ἦ ταῦτα δή με καὶ βεβούλευνται ποιεῖν;
ΧΡ. μάλισθ' · ὅταν περ οἰκαδ' Αἴγισθος μόλῃ.
ΗΛ. ἀλλ' ἐξίκοιτο τοῦδέ γ' οὕνεκ' ἐν τάχει.
ΧΡ. τίν', ὦ τάλαινα, τόνδ' ἐπηράσω λόγον;
ΗΛ. ἐλθεῖν ἐκεῖνον, εἴ τι τῶνδε δρᾶν νοεῖ.
ΧΡ. ὅπως πάθῃς τί χρῆμα; ποῦ ποτ' εἰ φρενῶν;
ΗΛ. ὅπως ἀφ' ὑμῶν ὡς προσώτατ' ἐκφύγω.
ΧΡ. βίου δὲ τοῦ παρόντος οὐ μνείαν ἔχεις;
ΗΛ. καλὸς γὰρ οὑμὸς βίοτος ὥστε θαυμάσαι.
ΧΡ. ἀλλ' ἦν ἀν, εἰ σύ γ' εὖ φρονεῖν ἠπίστασο.
ΗΛ. μή μ' ἐκδίδασκε τοῖς φίλοις εἶναι κακήν.
ΧΡ. ἀλλ' οὐ διδάσκω· τοῖς κρατοῦσι δ' εἰκαθεῖν.
ΗΛ. σὺ ταῦτα θώπευ' · οὐκ ἐμοὺς τρόπους λέγεις.
ΧΡ. καλόν γε μέντοι μὴ 'ξ ἀβουλίας πεσεῖν.
ΗΛ. πεσούμεθ', εἰ χρὴ, πατρὶ τιμωρούμενοι.
ΧΡ. πατὴρ δὲ τούτων, οἶδα, συγγνώμην ἔχει.
ΗΛ. ταῦτ' ἐστὶ τἀπὶ πρὸς κακῶν ἐπαινέσαι.
ΧΡ. σὺ δ' οὐχὶ πείσει καὶ συναινέσεις ἐμοί;

(B)
ΗΛ. ἄκουε δή νυν ἦ βεβουλευμαι τελειν.
παρουσίαν μὲν οἶσθα καὶ σύ που φίλων
ὡς οὐτις ἡμῖν ἐστιν, ἀλλ' Ἄιδης λαβὼν
ἀπεστέρηκε καὶ μόνα λελείμμεθον.
ἐγὼ δ' ἕως μὲν τὸν κασίγνητον βίῳ
θάλλοντ' ἐτ' εἰσήκουον, εἶχον ἐλπίδας

φόνου ποτ' αὐτὸν πράκτορ' ἴξεσθαι πατρός·
νῦν δ' ἡνίκ' οὐκ ἔτ' ἐστιν, ἐς σὲ δὴ βλέπω,
ὅπως τὸν αὐτόχειρα πατρῴου φόνου
ξὺν τῇδ' ἀδελφῇ μή κατοκνήσεις κτανεῖν
Αἴγισθον. οὐδὲν γάρ σε δεῖ κρύπτειν μ' ἔτι.
ποῖ γὰρ μενεῖς ῥᾴθυμος ἐς τίν' ἐλπίδων
βλέψασ' ἔτ' ὀρθήν; ἢ πάρεστι μὲν στένειν
πλούτου πατρῴου κτῆσιν ἐστερημένῃ,
πάρεστι δ' ἀλγεῖν ἐς τοσόνδε τοῦ χρόνου
ἀλεκτρα γηράσκουσαν ἀνυμέναιά τε.

(C) ΗΛ. ὦ φίλταται γυναῖκες, ἃ πολίτιδες,
ὁρᾶτ' Ὀρέστην τόνδε, μηχαναῖς μὲν
θανόντα, νῦν δὲ μηχαναῖς σεσωσμένον.
ΧΟ. ὁρῶμεν ὦ παῖ, κἀπὶ συμφοραῖσί μοι
γεγηθὸς ἕρπει δάκρυον ὀμμάτων ἄπο.
ΗΛ. ἰὼ γοναί,
γοναὶ σωμάτων ἐμοὶ φιλτάτων
ἐμόλετ' ἀρτίως,
ἐφηύρετ', ἦλθετ', εἴδεθ' οὓς ἐχρῄζετε.
ΟΡ. πάρεσμεν· ἀλλὰ σῖγ' ἔχουσα πρόσμενε.
ΗΛ. τί δ' ἐστιν;
ΟΡ. σιγᾶν ἀμεινον, μή τις ἐνδοθεν κλύῃ.
ΗΛ. ἀλλ' οὐ τὰν Ἄρτεμιν
τὰν αἰὲν ἀδμήταν,
τόδε μέ τι οὔ ποτ' ἀξιώσω τρέσαι
περισσὸν ἄχθος ἔνδον γυναικῶν ὂν ἀεί.
ΟΡ. ὅρα γε μὲν δὴ κἀν γυναιξὶν ὡς Ἄρης
ἐνεστιν· εἰ δ' ἐξισθα πειραθεῖσά που.
ΗΛ. ὀτοτοτοῖ τοτοῖ,
ἀνέφελοι ἐπέβαλες οὐ ποτε καταλύσιμον,
οὐδέ ποτ' ἀμπαυόμενον ἀμέτερον
οἶον ἔφυ κακόν.

2. (*a*) Write a sketch of the life and times of Sophocles. (*b*) Point out the leading characteristics and peculiar excellences of his dramas as compared with those of Euripides. (*c*) Write an outline of the plot of the Electra.

3. Explain the following grammatical usages:—(*a*) φάσκειν Μυκήνας ὁρᾶν. (*b*) κινεῖ σθένος ματ' σαφῆ. (*c*) μέλαινα ἀστρων ἐκλέλοιπεν εὐφρόνη. (*d*) ἀσκευον ἀσπίδων τε καὶ στρατοῦ. (*e*) ἥκετ' ἐμῶν καμάτων ταραμύθιον. (*f*) ἀλλ. ἐμέ γ' ἃ στονόεσσ' ἀραρεν φρένας ὀρνις ἀτυζομένα. (*g*) τοῦ κασιγνήτου τί φής;

4. Explain the etymology and meaning, as carefully as you can, of the following:—εὐμαρής, ἀλιπαρῆ, διάστορα, κροτητῶν, ἀψεγές, παλίρρυτον, θυηλῆς, νεακόνητον, σειραῖσιν, κυναγόν.

5. Discuss the meaning of the following:—(*a*) *χαλᾶτε πᾶν κάλυμμ' ἀπ' ὀφθαλμῶν.* (*b*) *φίλης γὰρ προξένου κατήνυσαν.* (*c*) *νεακύνητον*—al. *νεοκύνητον*—*αἷμα.* (*d*) *ὃς σ' ἀπ' ἐλπίδων οὐχ ὥνπερ ἐξέπεμπον εἰσεδεξάμην.* (*e*) *τὰ πολλὰ πνεύματ' ἔσχ' ἐν Αὐλίδι.*

6. (*a*) Give the equivalents of:—*κεἰ, κἂν, κἀν, χὴ, κεὐθύς, κἀτα.* (*b*) Write down the scheme of the *Iambic Senarius*, and scan the first four vss. of ext. (A).

7. Translate:—

(D) *Ἆρα λογίζεταί τις ὑμῶν, ὦ ἄνδρες Ἀθηναῖοι, καὶ θεωρεῖ τὸν τρόπον ὅτι ὑπ μέγας γέγονεν ἀσθενὴς ὢν τὸ κατ' ἀρχὰς Φίλιππος; τὸ πρῶτον Ἀμφίπολιν λαβὼν, μετὰ ταῦτα Πύδναν, πάλιν Ποτίδαιαν, Μεθώνην αὖθις, εἶτα Θετταλίας ἐπέβη· μετὰ ταῦτα Φεραὰς, Παγασὰς, Μαγνησίαν, πάνθ' ὃν ἐβούλετο εὑτρεπίσας τρόπον ὤχετ' εἰς Θρᾴκην· εἶτ' ἐκεῖ τοὺς μὲν ἐκβαλὼν, τοὺς δὲ καταστήσας τῶν βασιλέων ἠσθένησε· πάλιν ῥαίσας οὐκ ἐπὶ τὸ ῥᾳθυμεῖν ἀπέκλινεν ἀλλ εὐθὺς Ὀλυνθίοις ἐπεχείρησεν. τὰς δ' ἐπ' Ἰλλυριοὺς καὶ Παίονας αὐτοῦ καὶ πρὸς Ἀρύββαν καὶ ὑποι τις ἂν εἴποι παραλείπω στρατείας.*

(E) *Ἐγὼ γὰρ, ὦ ἄνδρες Ἀθηναῖοι, σφόδρ' ἂν ἡγούμην καὶ αὐτὸς ὀοβερὸν τὸν Φίλιππον καὶ θαυμαστὸν, εἰ τὰ δίκαια πράττοντα ἑώρων ηὐξημένον· νῦν δὲ θεωρῶν καί σκοπῶν εὑρίσκω τὴν μὲν ἡμετέραν εὐήθειαν τὸ κατ' ἀρχὰς, ὁτε Ὀλυνθίους ἀπήλαυνόν τινες ἐνθένδε βουλομένους ὑμῖν διαλεχθῆναι, τῷ τὴν Ἀμφίπολιν φάσκειν παραδώσειν καὶ τὸ θρυλούμενόν ποτε ἀπόρρητον ἐκεῖνο κατασκευάσαι, τούτῳ προσαγαγόμενον, τὴν δ' Ὀλυνθίων φιλίαν μετὰ ταῦτα τῷ Ποτίδαιαν οὖσαν ὑμετέραν ἐξελεῖν καὶ τοὺς μὲν πρότερον συμμαχους ὑμᾶς ἀδικῆσαι, παραδοῦναι δ' ἐκείνοις, Θετταλοὺς δὲ νῦν τὰ τελευταῖα τῷ Μαγνησίαν παραδώσειν ὑποσχέσθαι καὶ τὸν Φωκικὸν πόλεμον πολεμήσειν ὑπὲρ αὐτῶν ἀναδέξασθαι. ὅλως δ' οὐδεὶς ἐστιν ὑντιν' οὐ πεφενάκικεν ἐκεῖνος τῶν αὐτῷ χρησαμένων· τὴν γὰρ ἑκάστων ἄνοιαν ἀεὶ τῶν ἀγνοούντων αὐτὸν ἐξαπατῶν καὶ προσλαμβάνων οὕτως ηὐξήθη.*

8. Define the geographical positions of the places and peoples mentioned in extt. (D) and (E).

FIRST YEAR.

LATIN.—CICERO.—SELECT LETTERS.

FRIDAY, APRIL 2ND:—MORNING, 9 TO 12.

Examiner,..... .....REV. GEORGE CORNISH, LL.D.

1. Translate, expanding and translating the superscriptions:—

(A) CICERO ATTICO SAL.

Ut Athenas a. d. vii. Kal. Quinctiles veneram, exspectabam ibi iam quartum diem Pomptinum, neque de eius adventu certi quicquam habebam. Eram autem totus, crede mihi, tecum, et quamquam sine iis per me ipse,

tamen acrius vestigiis tuis monitus de te cogitabam. Quid quaeris? non mehercule alius ullus sermo nisi de te. Sed tu aliquid de *me* ipso scire fortasse mavis; haec sunt: adhuc sumptus nec in me aut publice aut privatim nec in quemquam comitum; nihil accipitur lege Iulia, nihil ab hospite; persuasum est omnibus meis serviendum esse famae meae; belle huc. Hoc animadversum Graecorum laude et multo sermone celebratur. od superest, elaboratur in hoc a me, sicut tibi sensi placere; sed haec tum laudemus, cum erunt perorata. Reliqua sunt eius modi, ut meum consilium saepe reprehendam, quod non aliqua ratione ex hoc negotio emerserim: O rem minime aptam meis moribus! O illud verum ἐρόοι τις!

(B) TULLIUS TIRONI SUO SAL. PLUR. DIC. ET CICERO MEUS ET FRATER ET FRATRIS F.

Paulo facilius putavi posse me ferre desiderium tui, sed plane non fero et, quamquam magni ad honorem nostrum interest, quam primum ad urbem me venire, tamen peccasse mihi videor, qui a te discesserim; sed quia tua voluntas ea videbatur esse, ut prorsus nisi confirmato corpore nolles navigare, adprobavi tuum consilium, neque nunc muto, si tu in eadem es sententia; sin autem postea, quam cibum cepisti, videris tibi posse me consequi, tuum consilium est. Marionem ad te eo misi, ut aut tecum ad me quam primum veniret, aut, si tu morarere, statim ad me rediret. Tu autem hoc tibi persuade, si commodo valetudinis tuae fieri possit, nihil me malle quam te esse mecum; si autem intelleges opus esse te Patris convalescendi causa paulum commorari, nihil me malle quam te valere. Si statim navigas, nos Leucade consequere; sin te confirmare vis, et comites et tempestates et navem idoneam ut habeas, diligenter videbis.

(C) TULLIUS TERENTIAE ET PATER TULLIAE, DUABUS ANIMIS SUIS, ET CICERO MATRI OPTIMAE, SUAVISSIMAE SORORI S. P. D.

Si vos valetis, nos valemus. Vestrum iam consilium est, non solum meum, quid sit vobis faciendum. Si ille Romam modeste venturus *est*, recte in praesentia domi esse potestis; sin homo amens diripiendam urbem daturus est, vereor ut Dolabella ipse satis nobis prodesse possit. Etiam illud metuo, ne iam intercludamur, ut, cum velitis exire, non liceat. Etiam illud verendum est, ne brevi tempore fames in urbe sit. His de rebus velim cum Pomponio, cum Camillo, cum quibus vobis videbitur, consideretis, ad summam animo forti sitis. Labienus rem meliorem fecit; adiuvat etiam Piso, quod ab urbe discedit et sceleris condemnat generum suum. Vos, meae carissimae animae, quam saepissime ad me scribite, et vos quid agatis et quid istic agatur. Quintus pater et filius et Rufus vobis s. d. Valete. VIII. Kal. Minturnis.

2. Explain the following usages:—(1) Vereor ut possit. (2) Metuo ne intercludamur ut cum velitis exire non liceat. (3) Nescio an ignoscendum huic. (4) Magni ad honorem nostrum interest. (5) Ne tui quidem testimonii veritus. (6) Etsi solet eum paenitere. (7) Pendeo animi.

3. (*a*) "Si ille Romam modeste venturus est:"—To whom is the reference, and what was the occasion? Give the date. (*b*) "Labienus rem meliorem fecit:"—State what you know of this person, and explain the

reference of the ext. (*c*) Write a short account of Cicero, and point out what his policy was at the time of his writing ext. (C), and also at a later period, and what were the consequences to him.

4. Explain the following:—(1) *Cum impero* in provinciam proficisci. (2) Aliquot *satisdationes* secundum *mancipium*. (3) Decretum illud *Areopagitarum*. (4) *Cohortem* primam centurionemque *primipili*. (5) *Loreolam in mustaceo quaerere*. (6) *Saturnalibus tertiis*. (7) Servum *a pedibus*. (8) Quod *scribendo* adfuisti.

5. Parse the following, giving the Nom. Sing. and Plu. of nouns, and the principal parts of the verbs :—vocabare, discubuimus, placarem, venibaut, domi, egerit, sorte, discesserim, morarere, locis, relaturum, cognossem.

6. Derive and explain :—Cerritior, miliario, nauseae, praerogativam, mehercule, demum, dumtaxat, *δυσεξείλητα*, *πανικά*, *ἀδωροδόκητον*.

7. (*a*) Expand the following contractions, and also express the dates according to our mode of reckoning :—(1) Pro coss. (2) Tullius et Cic. et Q. Q. Tironi s. p. d. (3) D. pr. Idus Ian. (4) A. d. vii. Kal. Quinctiles. (5) A. d. III. Idus Oct. (*b*) Expand and explain :—HS. CXX.

8. Define the geographical position of:—Pindenissum, Tauri Pylae, Arpinas, Aquinum, Minturnae, Tarsus, Patrae, Leucas.

9. (*a*) Decline the following:—frons (frondis), vis, vulgus, os. (*b*) Give the Genitives and Datives, sing. and plu., of merces, filia, domus, plus. (*c*) Write down the Comp. and Superlat. of :—vetus, felix, saepe, diu. (*d*) Give the Perf. and Sup. of :—metior, mentior, fido, findo.

INTERMEDIATE EXAMINATION.

FRIDAY, APRIL 2ND :—MORNING 9 TO 12.

LATIN.—VALERIUS MAXIMUS, BOOK III.

Examiners,..... { REV. GEORGE CORNISH, LL.D.
REV. GEORGE WEIR, M.A.

1. Translate:—

(A) Sed quod ad proeliatorum excellentem fortitudinem adtinet, merito L. Sicini Dentati commemoratio omnia Romana exempla *finierit*, cuius opera honoresque operum ultra fidem ueri excedere iudicari possent, nisi ea certi auctores, inter quos M. Varro, monumentis suis testata esse uoluissent. quem centies et uicies in aciem descendisse tradunt, *eo robore* animi atque corporis utentem, ut maiorem semper uictoriae partem traxisse *uideretur*: sex et xxx spolia ex hoste rettulisse, quorum in numero octo fuisse, cum quibus inspectante utroque exercitu ex prouocatione dimicasset, XIIII ciues ex media morte raptos seruasse, quinque et XL uulnera pectore excepisse, tergo cicatricibus uacuo: nouem triumphales imperatorum currus secutum, totius ciuitatis oculos in se numerosa donorum pompa conuertentem. praeferebantur enim aureae coronae octo, ciuicae XIIII, murales tres, obsidionalis una, torques LXXXIII, armillae CLX, hastae XVIII, phalerae XXV, ornamenta etiam legioni, nedum militi satis multa.

(B) Non paruus *consulatus* rubor M. Perpenna, utpote qui consul ante quam ciuis, sed in bello gerendo utilior aliquanto rei publicae Varrone imperatore. regem enim Aristonicum cepit Crassianaeque stragis punitor extitit: cum interim, cuius uita triumphauit, mors Papia lege damnata est. namque patrem illius, nihil ad se pertinentia ciuis Romani iura conplexum, Sabelli iudicio petitum redire in pristinas sedes coegerunt. ita M. Perpennae nomen adumbratum, falsus consulatus, caliginis simile imperium, caducus triumphus, aliena in urbe improbe peregrinatus est.

(C) Adiciam scaenae eiusdem exemplum. Antigenidas tibicen discipulo suo *magni profectus*, sed parum feliciter *populo se adprobanti cunctis audientibus* dixit 'mihi cane et Musis', quia uidelicet perfecta ars *fortunae tenocinio* defecta *iusta fiducia* non exuitur, quamque se scit laudem mereri, etiam si eam ab aliis non impetrat, domestico tamen acceptam iudicio refert

Zeuxis autem, cum Helenam pinxisset, quid de eo opere homines sensuri essent expectandum non putauit, sed protinus hos uersus adiecit :—

οὐ νέμεσις Τρῶας καὶ ἐυκνήμιδας Ἀχαιοὺς
τοιῇδ' ἀμφὶ γυναικὶ πολὺν χρόνον ἄλγεα πάσχειν.

adeone dextrae suae multum pictor adrogauit, ut ea tantum formae conprehensum crederet, quantum aut Leda caelesti partu edere aut Homerus diuino ingenio exprimere potuit?

(D) Vniuersa ciuitas Atheniensium, iniquissimo ac truculentissimo errore instincta, de capite decem praetorum, qui apud Arginussas Lacedaemoniam classem deleuerant, tristem sententiam tulerat. forte tunc eius potestatis Socrates, cuius arbitrio plebei scita ordinarentur, indignum iudicans tot et tam bene meritos ex indigna causa impetu inuidiae abripi, temeritati multitudinis constantiam suam obiecit, maximoque contionis fragore et incitatissimis minis conpulsus non est ut se publicae dementiae auctorem adscriberet. quae oppositu eius legitima grassari uia prohibita iniusto praetorum cruore manus suas contaminare perseuerauit. nec timuit Socrates ne consternatae patriae undecimus furor mors ipsius existeret.

2. Explain carefully the construction of the words in Italics in the above extt., and state concisely the rules of Syntax which govern them.

3. (*a*) Give the proper Latin words for the numerical signs in ext. (A) (*b*) Give the dates of *Crassianæ stragis*, and *lex Papia*, severally, and point out the chronological discrepancy involved. What other reading for Perpenna? (*c*) A short account, with dates, of the event referred to in ext. (D). (*d*) Whence the quotation of ext. (C)?

4. Write short explanatory notes on :—(1) *Coronæ civicæ, murales, obsidionales.* (2) *Spolia opima.* (3) *Bulla.* (4) *In legem ire.* (5) *Sententiam dicere.* (6) *II S quadragies.* (7) *Toga praetexta.* (8) *Candidam togam.*

5. Translate the following sentences, and account for the *moods* and *tenses* of the Subjunctive in them :—(1) Interrogavit quapropter nemo *inveniretur* qui tam crudelem tyrannum *occideret.* (2) Quære potius quemadmodum rationem non *reddas.* (3) Sed *viderint* Athenæ utrum Alcibiadem *lamententur* an *glorientur.* (4) Id agit, ut cum omnibus legibus Romanum imperium *corruat.*

6. Parse the following verbs: -direxissent, abscíso, effudit, inustum, sternendarum, cupitam, possedit, excussit, illisum, potiti essent, inseruisset, adjutus esset. (*b*) Write down the *Pres. Inf.* of the following participles:—Utens, jussus, audiens, ausus, captus, cœptus, acturus, proficiscens, faciendas.

7. State the difference in meaning between:—Senatus and curia; simulo and dissimulo; homo and vir; brachium, lacertus, ulna and cubitus; metuo ei and metuo eum; consulo ei and consulo eum; caveo ei and caveo eum; quotidie and in dies; rure and ruri; amplius, magis, and plus.

8. Decline:—*Vesper, nemus, domus, unus, aliquis.* (*b*) Write down the Comp. and Superlat. of—*Vetus, superus, felix, diu, laute.* (*c*) Write down all the Infinitives and Participles of:—*moneo* and *duco.*

9. What cases severally follow;—Pro, coram, juxta, penes, sub, and tenus?

10. How is the Future Infinitive rendered in Latin when the verb has no supine, or when the event is not to be described as being now about to happen? Translate into Latin;—He said that the town would be taken. He said that the town was about to be taken.

THIRD YEAR.

LATIN.—TERENCE.—ADELPHI.

WEDNESDAY, APRIL 7TH:—MORNING, 9 TO 12.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Translate into English:—

(A)

DE. Pro Iúppiter, tu homo ádigis me ad insaniam.
Non ést flagitium facere haec adulescéntulum? MI.
Ah,
Ausculta, ne me obtundas de hac re saépius.
Tuom filium dedisti adoptandum mihi:
Is méus est factus: siquid peccat, Démea,
Mihi péecat: ego illi maxumam partém feram.
Obsonat, potat, olet unguenta: dé meo;
Amat: dabitur a me argéntum, dum erit commodum.
Vbi non erit, fortasse excludetur foras.
Foris ecfregit: réstituentur; discidit
Vestém: resarciétur. et (dis gratia)
Est unde haec fiant, ét adhuc non molésta sunt.
Postrémo aut desine aut cedo quemuis arbitrum:
Te plura in hac re péccare ostendam. DE. Ei mihi,
Pater ésse disce ab illis, qui ueré sciunt.
MI. Natura tu illi pater es, consiliis ego.
DE. Tun consulis quicquam? MI. Ah, si pergis, abiero.
DE. Sicine agis? MI. An ego totiens de eadem re audiam?

(B)

Sy. Ehem Démea, haud aspéxeram te: quid agitur?
De. Quid agatur? uostram néqueo mirari satis
Rationem. Sy. Est hercle inépta, ne dicam dolo,
Absurda. piscis céteros purga, Dromo:
Congrum istum maxumum in aqua sinito ludere
Tantisper: ubi ego rédiero, exossabitur:
Prius nolo. De. Haecin flagitia! Sy. Mihi quidem *hau* placent
Et clamo saepe. salsamenta haec, Stéphanio,
Fac macerentur pulchre. De. Di uostram fidem,
Vtrum studione id sibi habet an laudi putat
Fore, si perdiderit gnatum? uae misero mihi.
Vidére uideor iam diem illum, quom hinc egens
Profugiet aliquo militatum. Sy. O Démea,
Istuc est sapere, non quod ante pedés modost
Vidére, sed etiam illa quae futura sunt
Prospicere. De. Quid? istaec iam penes uos psaltriast?
Sy. Ellam intus. De. Eho, an domist habiturus? Sy. Crédo, ut est
Deméntia. De. Haecin fieri! Sy. Inepta lénitas.

(C)

Dr. Heus Syre, rogat te Ctésipho ut redeas. Sy. Abi.
De. Quid Ctésiphonem hic narrat? Sy. Nil. De. Eho, carnufex,
Est Ctésipho intus? Sy. Non est. De. Quor hic nominat?
Sy. Est alius quidam, parasitaster paululus:
Nostin? De. Iam scibo. Sy. Quid agis? quo abis? De. Mitte me
Sy. Noli inquam. De. Non manum abstines, mastigia?
An tibi iam mauis cérebrum dispergam hic? Sy. Abit.
Edepol commissatorem haud sane commodum
Praesértim Ctesiphoni. quid ego nunc agam?
Nisi, dum haé silescunt turbae, interea in angulum
Aliquo abeam atque edormiscam hoc uilli. sic agam.

2. Translate and explain the following extracts:—(*a*) Acta ludis funebribus Æmili Paulli. (*b*) Modos fecit L. Flaccus Claudi tibiis sarranis. (*c*) Facta e Græca Menandru. (*d*) Illos duos olim pro re tollebas tua. (*e*) Ego meum jus persequar. (*f*) Nam ego liberali causa illam assero manu. (*g*) Frustra egomet has mecum rationes puto. (*h*) Restim ductans saltabis.

3. Analyse the construction of the following extracts:—(*a*) Hominem maximi preti te esse hodie animo judicavi meo. (*b*) Aliquo abeam, atque edormiscam hoc villi. (*c*) Sane nollem huc exitum. (*d*) Discrucior animi. (*e*) Et istam, quod potes, fac consolere. (*f*) Profugiet aliquo militatum. (*g*) Dari nuptum non potest.

4. Parse the following verbs:—siit, operiere, refrixerit, pepereris, consolere, reprensum, insuerit, cedo, scibo, produxe, sodes, faxim. Point out any peculiarities of formation.

5. Give the exact meaning and etymology of the following words:—villi, mastigia, sedulo, bellissimum, clanculum, flagitium, colaphos, scrupulum, germane, infitias, silicerniium, edepol.

6. (*a*) In vs. 6, Ext. (A), how do you translate and explain *illi*? (*b*) Point out the stems and the terminations of the following words:—ibi, ubi, alibi, humi militiæ, ruri. To what case do these words belong?

7. (*a*) Give examples of Archaic forms of verbs used by Terence. (*b*) What peculiar constructions are found with the verbs *utor*, *fungor*, and *potior*? (*c*) Write down the full forms of the following:—*sis*, *dis*, *produxe*, *exporge*, *sursum*, *lautum*.

8. Name the metre of ext. (A), and write down the scale of it.

9. (*a*) Distinguish between:—*foris crepuit* and *fores pultavit*. *E re nata* and *pro re nata*. (*b*) Give the meanings of the Singular and Plural of:—*carcer*, *copia*, *rostrum*, *littera*, *sal*, *impedimentum*, *aedes*, *auxilium*. (*c*) Write down the Genitive Plural of:—*poema*, *bos*, *caro*, *lis*, *ordo*, *mas*. (*d*) Give the Comparative and Superlative of;—*nequam*, *frugi*, *intra*, *prope*, *ultra*, *diu*.

10. A sketch of the life of Terence.

B.A. ORDINARY EXAMINATION.

WEDNESDAY, APRIL 7TH:—MORNING, 9 TO 12.

LATIN.—{ TACITUS—ANNALS, BOOK I.
JUVENAL—SATIRES VIII. AND X.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Translate:—

(A)

Igitur verso civitatis statu nihil usquam prisci et integri moris: omnes *exuta aequalitate* iussa principis *aspectare*, nulla in praesens formidine, dum Augustus aetate validus seque et domum et pacem sustentavit. postquam provecta iam senectus aegro et corpore fatigabatur aderatque finis et spes novae, pauci bona libertatis in cassum disserere, plures bellum pavescere, alii cupere. pars multo maxima iminentis dominos variis rumoribus *differebant*: trucem Agrippam et ignominia accensum non aetate neque rerum experientia tantae moli parem, Tiberium Neronem maturum annis, spectatum bello, set *vetere* atque *insita* Claudiae familiae *superbia*, multaque indicia saevitiae, quamquam premantur, erumpere. hunc et prima ab infantia eductum in domo regnatrice; congestos iuveni consulatus, triumphos; ne iis quidem annis, quibus Rhodi specie secessus exul *egerit*, aliquid quam iram et simulationem et secretas lubidines *meditatum*, accedere matrem muliebri inpotentia: serviendum feminae duobusque insuper adulescentibus, qui rem publicam interim premant, quandoque distrahant.

(B)

Discurrunt mutati et seditiosissimum quemque vinctos trahunt ad legatum legionis primae C. Caetronium, qui iudicium et poenas de singulis in hunc modum exercuit. stabant pro contione legiones destrictis gladiis; reus in suggestu per tribunum ostendebatur: si nocentem adclamaverant, praeceps

datus trucidabatur. et gaudebat caedibus miles, *tamquam* semet *absolveret*: nec Caesar arcebat, quando nullo ipsius iussu penes eosdem saevitia facti et invidia erat. secuti exemplum veterani haud multo post in Raetiam mittuntur, specie defendendae provinciae ob imminentis Suebos, ceterum ut avellerentur castris trucibus adhuc non minus asperitate remedii quam sceleris memoria. centurionatum inde egit. citatus ab imperatore nomen, ordinem, patriam, numerum stipendiorum, quae strenue in praeliis fecisset, et cui erant dona militaria, edebat. si tribuni, si legio industriam innocentiamque adprobaverant, retinebat ordinem: ubi avaritiam aut crudelitatem consensu obiectavissent, solvebatur militia.

(C)

At theatri licentia, *proximo priore anno* coepta, gravius tum erupit, occisis non modo e plebe set militibus et centurione, vulnerato tribuno praetoriae cohortis, dum probra in magistratus et dissensionem vulgi prohibent. actum de ea seditione apud patres dicebanturque sententiae, ut praetoribus ius virgarum in histriones esset. intercessit Haterius Agrippa tribunus plebei increpitusque est Asinii Galli oratione, silente Tiberio, qui ea simulacra libertatis senatui praebebat, valuit tamen intercessio, quia divus Augustus immunes verberum histriones quondam responderat, neque fas Tiberio infringere dicta eius. de modo lucaris et adversus lasciviam fautorum multa decernuntur; ex quis maxime insignia, ne domos pantomimorum senator introiret, ne egredientes in publicum equites Romani cingerent aut alibi quam in theatro spectarentur, et spectantium immodestiam exilio multandi potestas praetoribus fieret.

2. Explain the grammatical usages of the words in Italics in the above extt. Turn ext. (A) from *trucem* to the end, into the *oratio recta*.

3. Write short explanatory notes on the following historical references:—

(*a*) Libertatem et consulatum L. Brutus instituit. (*b*) Dictaturæ ad tempus sumebantur. (*c*) Neque decemviralis potestas ultra biennium. (*d*) Tribunorum militum consulare jus. (*e*) Lepidi atque Antonii arma in Augustum cessere. (*f*) Pompeius apud Siciliam oppressus.

4. Write explanatory notes on the following:—

(*a*) Ubi militem *donis*, populum *annona*, pellexit. (*b*) Aut *proscriptione* cecidissent. (*c*) *Posita puerili prætexta*. (*d*) *In verba* Tib. Cæsaris *jurare*. (*e*) *Testamentum* inlatum per *Virgines Vestæ*. (*f*) Quot *tributa* aut *vectigalia* et *necessitates*. (*g*) *Aram adoptionis* prohibuit. (*h*) Decreta *triumphalia insignia*.

5. Parse the following verbs:—cessere, cecidissent, pellexit, subderetur, prompsisset, perstrinxere, adulta, stratis, descivere, nisi, quiverit.

6. Explain the primary meaning of, and the distinction between, the terms *Annales* and *Historiae*.

7. Give a list of the Roman Emperors down to the period of the death of Tacitus, and mention those during whose reigns he lived. To what so-called age of the language and literature of Rome is he to be assigned? What writers were his contemporaries?

8. (D) Translate :—

Exspectata diu tandem provincia quum te
Rectorem accipiet, pone iræ fræna modumque,
Pone et avaritiæ; miserere inopum *sociorum*;
Ossa vides regum vacuis exsucta medullis.
Respice, quid moneant leges, quid *curia* mandet,
Præmia quanta bonos maneant, quam fulmine justo
Et Capito et Numitor ruerint, damnante Senatu
Piratæ Cilicum; sed quid damnatio confert,
Quum Pansa eripiat quidquid tibi Natta reliquit?
Præconem, Chærippe, tuis circumspice pannis,
Jamque face: furor est post omnia perdere naulum.
Non idem gemitus olim, neque vultus erat par
Damnorum sociis florentibus et modo victis.
Plena domus tunc omnis, et ingens stabat acervus
Nummorum, Spartana *chlamys*, *conchylia* Coa,
Et cum *Parrhasii tabulis signisque Myronis*
Phidiacum vivebat *ebur*; nec non *Polycleti*
Multus ubique *labor*; rarae sine Mentore mensae.
Inde Dolabellae et atque hinc Antonius, inde
Sacrilegus Verres: referebant navibus altis
Occulta spolia et plures de pace triumphos.

(E) Expende Hannibalem; quot libras in duce summo
Invenies? hic est quem non capit Africa Mauro
Percussa Oceano Nilogue admota tepenti,
Rursus ad Æthiopum populos altosque elephantos.
Additur imperiis Hispania: Pyrenæum
Transilit. Opposuit natura Alpemque nivemque:
Diducit scopulos et montem rumpit aceto.
Jam cetera Italiam: tamen ultra pergere tendit:
"Actum," inquit, "nihil est, nisi Pœno milite portas
Frangimus et media vexillum pono Suburra."
O qualis facies et quali digna tabella,
Quum Gætulus ducem portaret bellua luscum!
Exitus ergo quis est? O gloria! vincitur idem
Nempe et in exsilium præceps fugit, atque ibi magnus
Mirandusque cliens sedet ad prætoria regis,
Donec Bithyno libeat vigilare tyranno.
Finem animæ, quæ res humanas miscuit olim,
Non gladii, non saxa dabunt, nec tela; sed ille
Cannarum vindex et tanti sanguinis ultor,
Annulus.

9. (*a*) Give an account of Hannibal, and explain the allusions of ext. (E) pointing out what is exaggerated or legendary in them. (*b*) Explain what is meant by the words in Italics of ext. (D.)

10. Specify the cases which the following words severally are construed with :—causa, satis, quot, expers, patiens, æqualis, refert, tenus, affinis utor, vescor.

FIRST YEAR.

GREEK AND LATIN PROSE COMPOSITION.

THURSDAY, APRIL 1ST:—AFTERNOON, 2 TO 4.

Examiner,.....REV. GEORGE CORNISH, LL.D.

(A) Translate into Greek:—

1. The soldiers admired the beauty of the city, into which the general had led them.

2. He rejoiced that his son was both wise and good.

3. The army marched into the territory of the enemy, and laid it waste.

4. Never flatter those who do injury to their country and their friends.

5. Socrates, the philosopher, was both wise and good.

6. Some spoke well of the king, while others spoke ill of him.

7. The general who treats his soldiers well is deserving of praise from all his fellow-citizens.

8. The army came in order to ravage the greater part of the Peloponnesus.

(B) Translate into Latin:—

1. Alexander the Great founded Alexandria, and made it rich and prosperous.

2. Athens, the capital of Attica, was taken and destroyed by the Persians.

3. It is the duty of all men to obey the laws, and to be mindful of the benefits they receive from the commonwealth.

4. Brutus pretended to be mad, in order the more easily to deceive his enemies, and to serve his country.

5. You and your friend have finished the work to your satisfaction; but my friend and I have left ours undone.

6. It is the duty of parents to teach their children justice, temperance, filial affection, and a love of truth, in order to their becoming good citizens.

7. The envoys came to the general and informed him of their business, but he concealed from them his own opinion.

8. He left his helmet in his tent, and on entering the town he was struck on the head with a large stone and slain.

B.A. ORDINARY EXAMINATION.

WEDNESDAY, APRIL 7TH:—AFTERNOON, 2 TO 4.

GENERAL PAPER.

Examiner.....REV. GEORGE CORNISH, LL.D.

1. Give an account, with dates, of the origin and principal events of the Persian Wars.

2. What was the period of the Athenian supremacy in the affairs of Greece? Name the statesmen and generals that mainly contributed to the maintenance of supremacy.

3. State the distinction between a *Despotism*, *Monarchy*, *Oligarchy* and *Democracy*, as they are found in the history of Greece, and give the derivation of these terms. Name the most celebrated *Despots* in Grecian history. What term did the Greeks apply to them?

4. Give the dates of the accession and death of Philip of Macedon, and mention the measures and general policy by which he extended and consolidated his power.

5. At what time did Greece become a Roman Province, and by what name was it designated?

6. Give a short account of the three leading Historians and Dramatists of Greece.

7. Give a short account, with dates, of the following events:—(1) The invasion of Italy by the Gauls; (2) Establishment of the *Decemvirate*; (3) The war with Pyrrhus.

8. Write a sketch of the state of society at Rome, politically and socially, as depicted by Tacitus in the First Book of his Annals. What is the date of the events recorded in that book?

9. Mention the Roman *Historians* whose works have come down to us.

10. Give a short account of the other Roman Satirists besides Juvenal. At what period did Juvenal flourish?

FIRST YEAR.

HISTORY.—HISTORY OF GREECE AND ROME.

FRIDAY, APRIL 2ND:—AFTERNOON, 2 TO 4.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. (*a*) A sketch of the physical geography of Greece. (*b*) Point out the natural advantages of the country from a political and commercial point of view.

2. (*a*) What is known of the political and social condition of Greece in the earliest times? (*b*) What is meant by the *Mythical Period*? Name the leading personages and events of it.

3. What events and institutions tended to promote unity of sentiment and of action among the various States of Greece; and, on the other hand, what causes operated to finally prevent this?

4 (*a*) An account of the political and social institutions of the Spartans. (*b*) Explain the terms *Perioeci*, *Helots*, and *Neodamodes*.

5. A short account of the rule of Peisistratus, and of the legislation of Cleisthenes, at Athens.

6. Write short historial notes, with dates, on any four of the following:—(1) Ladé, (2) Marathon, (3) Ægina, (4) Salamis, (5) Platæa, (6) Eurymedon, (7) Corcyra, (8) Sphacteria, (9) Syracuse, (10) Ægospotami.

7. (*a*) Give the dates of the establishment and overthrow of the Monarchy at Rome. (*b*) Write down the names of the kings in the order of their succession, and mention the important wars and political changes that took place during the reigns of any of them.

8. (*a*) When, and under what circumstances, was the office of the *Tribunus Plebis* instituted? (*b*) Give an account of its functions and powers.

9. At what period and after what wars did Rome become mistress of Italy?

10. How many years did Hannibal continue in Italy, and what signal defeats did he inflict upon the Romans?

THIRD YEAR EXAMINATION FOR HONOURS.

LATIN.

SATURDAY, APRIL 17TH:—MORNING, 9 TO 12.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Translate:—

(A) Tacitus, Annals, Book I., Chap. xvii.

2. (*a*) *Paucis centurionibus; paucioribus tribunis*:—How many were there, severally, in a legion? (*b*) Explain:—(1) Apud vexillum tendentes. (2) Vacationes munerum. (3) Incusant vallum, fossas, pabuli materia, lignorum adgestus. (4) Sacramento adigit. (5) Centurionatum egit. (6) Campum eripi. (*c*) Define the geographical position, and give modern names where you can, of the following places:—Vetera, Ara Ubiorum, Pandateria, Treveri, Nauportus.

3. Translate:—

(B) Terence, Adelphi, Act I., sc. ii., vss. 1-30, adding explanatory notes on any peculiarities of grammatical construction, or of forms of words, or of expression, that occur.

4. (*a*) Write down the name and scale of the metre of Ext. (B), and scan the first five vss. (*b*) Translate, and explain the personal and other references of vss. 15–21 of the Prologue. (*c*) Whence did the Latin Dramatists derive the materials for their dramas?

5. Translate :—

(C) Juvenal, Sat. VIII., vss. 39-70 ; and (D) Sat. X., vss. 61-75.

6. (*a*) Discuss the following various readings:—(C) vs. 42, *et* te; *Coryphaei* posteritas ; vs. 67, *nepotum*. (*b*) Explain:—*Nobilis, sub aggere, Cecropides, juris, legum, juvenis, trunco Hermae, generosa, epiredia, ducitur uncо, Nurtia, Augustus.*

7. Translate :—

(E) Persius, Sat. V., vs. 52–72.

8. Derive, and explain the meaning of:—cuminum, satur, putris, cheragra, palustrem, temone, canthum, tesserula, gausapa, artocreas, exossatus, popa.

9. What is meant by the silver age of the Latin language? Mention some of its prominent authors.

10. Institute a comparison between Juvenal and Persius in respect of their leading characteristics as writers of Satire.

11. Express in Latin, in as many ways as possible, 'Hannibal sent ambassadors to seek peace,' pointing out which are most eligible.

GREEK AND LATIN PROSE COMPOSITION.

Saturday, April 17th :—Afternoon, 2 to 5.

Examiner,.....Rev. George Cornish, LL.D.

(A) Translate into Greek (accented) :—

During the scene of horror, the most intrepid exertions were made to rescue these helpless sufferers from the flames. No person thought of his own property or concerns—everyone hastened thither. The women were eminently active, regardless of the shot that fell around them, and braving the flames of the building. It has often been remarked, that the wickedness of women exceeds that of the other sex ; for the same reason, when circumstances, forcing them out of their ordinary nature, compel them to exercise manly virtues, they display them in the highest degree. The loss of women and boys during the seige was very great, fully proportionate to that of the men ; they were always the most forward, and the difficulty was to teach them a prudent and proper sense of their danger.

(B) Translate into Latin :—

But after all it must needs be owned that Pompey had a very difficult part to play, and much less liberty of executing what he himself approved

than in all the other wars in which he had been engaged. In his wars against foreign foes his power was absolute, and all his motions depended on his own will; but in this, besides several kings and princes of the East, who attended him in person, he had with him in his camp the chief magistrates and senators of Rome; men of equal dignity with himself, who commanded armies and obtained triumphs, and expected a share in all his councils; and that in their common danger no step should be taken but with their common advice; and as they were under no engagement to his cause but what was voluntary, so they were necessarily to be humoured lest through disgust they should desert it. Now these were all uneasy in their present situation, and longed to be at home, in the enjoyment of their estates and honours; and having a confidence of victory from the number of their troops, and the reputation of their leader, were perpetually teasing Pompey to the resolution of a battle, charging him with a design to protract the war for the sake of perpetuating his authority, and calling him another Agamemnon, who was proud of holding so many kings and generals under his command; till being unable to withstand their reproaches any longer, he was driven by a kind of shame, and against his judgment, to the experiment of a decisive action.

GREEK.

FRIDAY, APRIL 23RD:—MORNING, 9 TO 12.

Examiner, ...REV. GEORGE CORNISH, LL.D.

1. Translate the following extracts, adding an explanatory note where you deem it necessary:—

(A) Pindar, Ol. II., vss. 48-83.

(B) Theocritus, Idyl I., vss. 95-119.

(C) Aristophanes, The Frogs, vss. 108-128; and 1251-1260.

(D) Æschylus, Seven against Thebes, vss. 702-719.

2. Ext. (A):—(*a*) Give an account of the Festivals referred to in this ext. (*b*) Give a statement of the facts known of the life of Pindar. On what grounds has so high a position been assigned to him as a poet? (*c*) Explain carefully, as respects both etymology and meaning, the following words:—*ὁμόκλαρον*, *ἀρίζηλος*, *ἀπάλαμνοι*, *ἀστραβῆ*, *πραπίσιν*, *ἄωτον*, *νεοσίγαλον*, *ξρανον*. (*d*) Ol. I., 28, *ἢ Θαυματὰ πολλά*: Dissen, *θαύματα*:—distinguish between them, and point out which is preferable. Ol. II., 87,—*ἄκραντα γαρύετον κ. τ. λ.*—explain the reference.

3. (*a*) Show the construction of vss. 1-2 of Theocr. Idyl I. (*b*) Parse the following, giving equivalents in Attic:—*ἀποισῇ*, *τεῖδε*, *ᾧδήκαντι*, *θᾶσαι*, *δασπλῆτι*, *τίν*, *ἧς*, *παρῆμεν*. (*c*) An account of Theocritus and his poetry. (*d*) Derive and define the term *εἰδύλλιον*.

4. Explain the following from The Frogs:—(1) *κωδωνίσω*, v. 78. (2) *κόβαλα*, 104. (3) *ἐς Κεραμεικόν*. (4) *δι' ὀβολὼ μισθὸν λαβών*. (5)

Ὄνον Πόκας. (6) ἔφισε φράτερας, 418. (7) ἐβουλόμην. (8) οὐ' Χῖος, ἀλλὰ Κεῖος. (*b*) Analyse the metres of vss. 1251-1260. (*c*) What are the points which Aristophanes ridicules in Euripides? What were the grounds of his antipathy against him?

5. What is the primary meaning of the Subjunctive mood? of the Optative? and explain, in accordance with your answer, the distinction between *εἰ τοῦτο λέγοις ἁμαρτάνοις ἄν*, and *ἐὰν τοῦτο λέγῃς ἁμαρτάνοις ἄν*.

6. Show the various ways of expressing (1) a purpose, and (2) a wish, in Greek.

7. Distinguish between the meanings of *κατὰ* in the following verbs:—
κατακαίω, καθοράω, κατέρχομαι, κατάγω, καταγιγνωσκω.

8. Accent the following:—

Καιτοι πως αν εκεινων ανδρες αμεινους η μαλλον φιλελληνες οντες επιδειχθειεν, οιτινες ετλησαν επιδειν ωστε μη τοις λοιποις αιτιοι γενεσθαι της δουλειας, ερημην μεν την πολιν γενομενην, την δε χωραν πορθουμενην, ιερα δε συλωμενα και νεως εμπιπραμενοις, απαντα δε τον πολεμον περι την πατριδα την αυτων γιγνομενον; και μηδε ταυτ' απεχρησεν αυτοις, αλλα προς χιλιας και διακοσιας τριηρεις μονοι διαναυμαχειν εμελετησαν.

GREEK AND ROMAN HISTORY.

FRIDAY, APRIL 23RD:—AFTERNOON, 2 TO 5.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Name the districts of Greece inhabited by (1) the Æolic, (2) the Doric, and (3) the Ionic races, severally. Name the leading colonies settled by each.

2. The Greek and Roman systems of colonisation, and the relations of the colonies respectively to the parent state. Which system bore the greater resemblance to the English system?

3. The nature and object of the reforms of Cleisthenes in the constitution of Athens.

4. (*a*) The constitution and functions of the Senate of Five Hundred at Athens. (*b*) Also those of the Court of Areopagus in the time of Æschylus.

5. What does Grote prove of the true character and object of *Ostracism?* Mention some of the principal occasions when it was resorted to?

6. Give a succinct account of Xerxes' expedition against Greece; and describe the conduct of the several Hellenic nations at the time.

7. The period of the supremacy of Athens; her policy and relations with other States; the sources of her strength and weakness; and the causes of her downfall.

8. An account of the constitution and functions of the Roman Senate. What modifications were made at various times, and by whom ?

9. What was the real character and object of the *Leges Agrariae* at Rome ? Define the terms *Ager publicus* and *possessio*.

10. Trace the most important political events and constitutional changes at Rome, with dates, from the period of the expulsion of the Kings down to the Punic wars.

B. A. EXAMINATION FOR HONOURS.

LATIN PROSE COMPOSITION.

MONDAY, APRIL, 12TH :—MORNING 9 TO 12.

Examiner,.....REV. GEORGE CORNISH, LL.D.

Translate into Latin :—

(A) Pompey applied himself immediately to calm the public disorders, and published several new laws prepared by him for that purpose ; one of them was to appoint a special commission to inquire into the death of Clodius, the burning of the Senate House, and the attack on M. Lepidus, and to appoint an extraordinary judge of consular rank to preside in it. A second was against bribery and corruption in elections, with the infliction of new and severe penalties. By these laws the method of trials was altered, and the length of them limited. Three days were allowed for the examination of witnesses, the fourth for the sentence, in which the accuser was to have two hours only to enforce his charge ; the criminal three for his defence, which regulation Tacitus seems to consider the first step towards the ruin of Roman eloquence, by imposing reins as it were upon its full and ancient course. Cœlius opposed his negative to these laws, as being rather privileges than laws, and provided particularly against Milo. But he was soon compelled to withdraw it upon Pompey's declaring he would support them by force of arms. The three tribunes were all the while constantly haranguing and terrifying the city with forged statements of magazines of arms, prepared by Milo for the massacre of his enemies and burning the city, and they produced their creatures in the rostra to vouch for the truth of them to the people.

(B) He became at length so confident of his force, so collected in his might, that he made no secret whatever of his dreadful resolution. Having terminated his disputes with every enemy and every rival, who buried their mutual animosities in their common detestation against the creditors of the Nabob of Arcot, he drew from every quarter whatever a savage ferocity could add to his new rudiments in the arts of destruction ; and, compounding all the materials of fury, havoc, and desolation into one black cloud, he hung for a while on the declivities of the mountains. Whilst the authors of all these evils were idly and stupidly gazing on this menacing meteor, which blackened all the horizon, it suddenly burst, and poured down the whole of its contents upon the plains of the Carnatic.

GREEK PROSE COMPOSITION.

MONDAY, APRIL 12TH :—AFTERNOON, 2 TO 5.

Examiner,.....REV. GEORGE CORNISH, LL.D.

Translate into Greek (accented) :—

(A) My son, you are yet young: time will make an alteration in your opinions; and of many, which you now strongly maintain, you will hereafter advocate the very reverse: wait, therefore, till time has made you a judge of matters, so deep and so important in their nature. For that which you now regard as nothing, is, in fact, the concern of the very highest moment; I mean, the direction of life to good or bad purposes, by corresponding investigations into the nature of the gods. One thing, and that not trivial, I can at least venture, in all the confidence of truth, to assure you respecting them; the sentiments, which you now entertain, are not solitary, first originated by you or your friends; they are such as, at all times, have found advocates, more or less in number; but I speak the language of experience when I say, that not one of those, who in their youth had been led to think that there were no gods, has found his old age consistent in opinion with that of his more juvenile years.

(B) The constitution they established was a pure democracy for no other reason than because it pleased the poorer sort, on whom they depended. Nothing, however, was farther from their intention than to share with any one else the power they so studiously sought. In name they put forward equality, in reality their government was an unrestrained tyranny. Having nothing which they could fear to lose in all their projects of ambition they were heedless; having no ties of shame, for a while they reaped the fruits of their lawless audacity.

LATIN POETS.

SATURDAY, APRIL 17TH :—MORNING, 9 TO 12.

Examiner.....REV. GEORGE CORNISH LL.D.

1. Translate, adding an explanatory note where you may deem it necessary on any peculiar form or construction :—

(A) Plautus, Aulularia, Act II., sc. ii., vss. 1–21.

(B) Terence, Adelphi, Act III. sc. iii., vss. 1–21.

2. Analyse, and give the full equivalent of such forms as :—Quor, scin, quorsum, reist, operiere, faxo, hocine, quoi, quom, sodes.

3 (*a*) Explain the force of the prepositions in the following :—*Aul.*—Prol. 2, ex hac familia; ib. 21, ex se; I., 3, 40, in viros; II., 1, 33, in rem; ib. 2, 8, a pecunia; III., 2, 6, de industria. (*b*) Point out peculiarities of Syntax in Plautus and Terence, as compared with the usages of the Augustan writers. (*c*) Name the metre of ext. (B) and scan any four vss., carefully indicating the feet and quantities.

4. Translate :—

(C) Juvenal, Sat. VIII., vs. 211–230.

(D) Persius, Sat. VI., vss. 1-17.

(E) Horace, Satt. Book I., Sat. x., vss. 20–39.

5. (*a*) Cite the passage from Tacitus in which he relates the enactment of what is referred to in vs. 1 of ext. (C). Explain the mythical and historical references of the same ext. In vs. 223, Jahn, with Madvig, reads *quod* for *quid*; punctuate and translate accordingly. (*b*) Translate and explain the following :—(*a*) Ut Braccatorum * * * molesta, VIII., 234-35. (*b*) Arpinas alius * * * dolabra, ib. 245-49; cite a scene from the Annals of Tacitus illustrative of this. (*c*) Quam timeo victus * * * male defensus, x. 84–84. (*d*) Vulnera Parthi * * * ferrum, Persius, V., 4. (*e*) Hortante Camena, ib., 21. (*f*) Vindicta postquam * * * rubrica vetavit, ib., 88-90. (*g*) Ita fit * * * unguine pultis, VI., 38–40. (*h*) Ambubaiarum collegia * * * morte Tigelli, Horace, Sat. ii., 1–3. (*i*) Tristes Kalendae, iii., 87. (*j*) Ad unguem factus homo, v. 32. (*c*) Point out the characteristics of Horace, Juvenal and Persius, as Satirists. At what intervals of time and under what Emperors did they severally live?

6. Translate :—

(F) Virgil, Æneid, Book III., vss. 570-87.

7. (*a*) Enceladi semiustum corpus :—How does Aeschylus describe and name the giant? (*b*) In 531, how do you account for the use of the subjunctive in *mutet?* (*c*) For *mutet* there is a variant *motet*:—distinguish between them, and point out which you deem preferable, and why?

LATIN PROSE WRITERS.

SATURDAY, APRIL 17TH :—AFTERNOON, 2 TO 5.

Examiner,..... .....REV. GEORGE CORNISH, LL.D.

1. Translate the following extracts into English, adding a brief comment where any peculiar form or construction seems to you to require it :—

(A) Tacitus, Annals, Book I., chap. lix.

(B) Tacitus, Histories, Book I., chaps. lxi., lxii.

(C) Livy, Book XXII., chap. xlvii.

(D) Livy, Book XXIII., chap. xi.

2. Ext. (A) :— (1) Explain the construction of 'Ut quibusque bellum volentibus erat,' and cite other passages that you may know in Greek or Latin illustrative of the usage. (2) 'Fama dediti Segestis,' 'rapta uxor,' 'nescia tributa' :—Comment on these usages, and also point out those peculiarities of the style of Tacitus, as compared with that of Cicero, which are most characteristic of him. (3) 'Sibi tres legiones totidem legatos procu-

buisse'; 'sacerdotium hominum,'; 'quod inter Albim et Rhenum * * * viderint':—explain, giving names and dates. (4) Illustrate by means of this ext. the difference between the *oratio obliqua* and the *oratio recta*. (5) Væcordem;—derive and explain this term.

3. Ext. (B):—(1) Give the date of the events here recorded, and name the Emperors that occupied the throne that same year. (2.) 'Cottianis Alpibus,' 'Poeninis jugis';—define the positions and give modern names. Also those of Lugdunenses, Viennenses, Lucus, Vercellae. (3) Chap. lxxix., Histt. I.:—"Sarmatica gens";—who and where did they dwell? (4) ib. 'Romanus miles * * * lorica, missili pilo, aut lanceis, levi gladio';—describe the equipment of the *legionarius*, and carefully explain the above terms, pointing out to what class of troops *lanceis* applies.

4 Ext. (C):—(1) Acrius tamen quam diutius;—Give the import of the comparatives. (2) Give the date and locality of the battle here described. Was it followed by any important consequences? (3) A short account of Livy as a historian. To what extent may his story of the campaigns of Hannibal be regarded as trustworthy or the opposite, and why?

5. Translate:—

(E) Cicero, De Officiis, Book III., chap. xx., secs. 79 & 80.

(F) Cicero, De Imp. Cn. Pomp., chap. i.

6. (*a*) 'At enim', express this in Greek, and supply the ellipsis. (*b*) Give an account of the philosophy of Cicero, and name its chief followers among the Greeks. (*c*) How does Cicero in this Book deal with the question of the relationship between the *utile* and the *honestum*? (*d*) What were the special circumstances connected with the delivery of the oration De Imp. Cn. Pompeii?

GREEK POETS.

Friday, April 23rd:—Morning, 9 to 12.

Examiner,.....Rev. George Cornish, LL.D.

1. Translate, with an explanatory note when you deem it necessary:—

(A) Pindar, Olympia II., vss. 48-83.

(B) Theocritus, Idyl I., vss. 95-119.

(C) Aristophanes, The Frogs, vss. 108-128; and 1251-1260.

(D) Æschylus, Seven against Thebes, vss. 702-719.

2. Ext. (A):—(*a*) Give an account of the Festivals referred to in this ext. (*b*) Give a statement of the facts known of the life of Pindar. On what grounds has so high a position been assigned to him as a poet? (*c*) Explain carefully, as respects both etymology and meaning, the following words:—ὁμόκλαρον, ἀριζήλος, ἀπάλαμνοι, ἀστραβῆ, πραπίσιν, ἄωτον,

νεοσίγαλον, ἔρανον. (*d*) Ol. I., 28, *ἡ θαυματὰ πολλά*:—Dissen reads *θαύματα*; distinguish between them, and point out which is preferable. Ol. II., 87, *ἀκραντα γαρύετον κ. τ. λ.*—explain the reference.

3. (*a*) Show the construction of vss. 1 and 2 of Theocr. Idyl I. (*b*) Parse the following, giving equivalents in Attic:—*ἀποισῇ, τεῖδε, ᾠδήκαντι, ϑᾶσαι, δασπλῆτι, τίν, ἧς, παρῆμεν.* (c) An account of Theocritus and of his poetry. (d) Derive and define the term *εἰδύλλιον.*

4. (*a*) Explain the following from the Frogs:—(1) *κωδωνίσω*, 78. (2) *κόβαλα*, 104. (3) *ἐς Κεραμεικόν.* (4) *δύ' ὀβολὼ μισθὸν λαβών.* (5) *Ὄνου Πάκας.* (6) *ἔφυσε φράτερας*, 418. (7) *ἐβουλόμην*, 866. (8) *οὐ Χῖος, ἀλλὰ Κεῖος.* (*b*) Analyse the metres of vss. 1251–1260. (*c*) What are the points which Aristophanes ridicules in Euripides? What were the grounds of his antipathy?

5. Translate:—

(E) Sophocles, Antigone, vss. 605-625.

(F) Euripides, Hippolytus, vss. 268-284.

(G) Hesiod, Works and Days, vss. 639-660.

6. Write an account of Hesiod, and point out the leading features of his poetry.

GREEK PROSE WRITERS.

FRIDAY, APRIL 23RD:—AFTERNOON, 2 TO 5.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Translate, adding an explanatory note where you deem it necessary the following extracts:—

(A) Æschines, Contra Ctesiphontem, §§ 215, 216 (Ed. Teubner.).

(B) Demosthenes, De Corona, Cap. 270:—*Οὐκ ἀπορων δ' ὁτι χρὴ*
* * *πόθεν γὰρ ἀλλοθεν*; How do you construe and explain *οὐδὲ γὰρ ὢν ἐτυχεν ἦν*?

2. (*a*) Give the dates of the delivery of these orations respectively. (*b*) What was the arrangement of the defence proposed by Æschines? And what was that which Demosthenes adopted? What reasons may be assigned for the former insisting upon, and the latter rejecting, such an arrangement? (*c*) Translate, with explanatory notes, the following:—*Ἐπὶ Μνησιφίλου ἀρχοντος, συγκλήτου ἐκκλησίας ὑπὸ στρατηγῶν γενομένης, καὶ Πρυτάνεων καὶ Βουλῆς γνώμῃ, Μαιμακτηριῶνος δεκάτῃ ἀπίοντος, Καλλισθένης Ἐτεονίκου Φαληρεὺς εἶπε.*

3. (*a*) Translate the following extract:—*Δεδόχθαι τῷ δάμῳ τᾷ Βυζαντίων καὶ Περινθίων, Ἀθαναίοις δόμεν ἐπιγαμίαν, πολιτείαν, ἔγκτασιν γᾶς καὶ οἰκιᾶν, προεδρίαν ἐν τοῖς ἀγῶσι, πόθοδον ποτὶ τὰν*

βωλὰν καὶ τὸν δᾶμον πράτοις μετα τα ἱερά, καὶ τοῖς κατοικέειν ἐθέλουσι τὰν πόλιν ἀλειτουργήτοις ἦμεν πασᾶν τᾶν λειτουργιᾶν. (*b*) Name the dialect of this extract, and state in what districts of Greece it was used. (*c*) Turn the ext. into Attic Greek.

4. Translate:—

(C) Herodotus, Book VIII., Chaps. lxi. and lxii.

5. Translate the following references to the Spartans from Book IX., with short explanatory notes touching the political or social usages and national characteristics referred to:—

(*a*) μοῦνοι δὲ δὴ πάντων ἀνθρώπων ἐγένοντο οὗτοι Σπαρτιήτησι πολιῆται. (c. 35.) (*b*) κέλευσαι * * * Λακωνικὸν δεῖπνον. (c. 82.) (*c*) τῶν Εἱλωτέων πεντακισχίλιοι καὶ τρισμύριοι. (c. 28.) (*d*) Δακεδαιμόνιοι δὲ οὐκ ἐων φεύγοντας διώκειν. (c. 77.) (*e*) οὐκ ἐπισταμένων τειχομαχέειν. (c. 70.) (*f*) καί σφι ἦν ὑακίνθια—περὶ πλείστου δ' ἦγον τὰ τοῦ θεοῦ πορσύνειν. (c. 9.) (*g*) τὰ Δακεδαιμονίων ὁρονήματα ὡς ἄλλα ὁρονεόντων καὶ ἄλλα λεγόντων. (c. 64.)

6. Translate:—

(D) Thucydides, Book I., Chap. lxi.

(E) Xenophon, Hellenics, Book I., Chap. VI., §§ 28-31.

7. (*a*) Ext. (D):—τῶν πόλεων,—explain the use of the Genitive. (*b*) Ext. (E):—(1) Explain the Plu. in μέσας νέκτας. (2) ἀνεσχεν, —what is the subject? Illustrate from Latin and English usage. (3) διέκπλουν καὶ περίπλουν—describe the manœuvres. (4) ἐπι μιᾶς,—supply the ellipsis, and state the import of the Preposition. (*c*) Sketch a plan of the position of the hostile fleets from the description here given by Xenophon.

8. Translate:—

(F) Plato, De Republica, Book I., Chap. xxii., down to οὖσα ἀδικος.

(G) Aristotle, Nicomach. Ethics, Book II., Chap. viii., down to ἀνομοιότης.

9. A general account of the Republic of Plato and of the purpose with which it was written.

GENERAL PAPER.

MONDAY, APRIL 26TH:—MORNING, 9 TO 12.

Examiner,.....REV. GEORGE CORNISH, LL.D.

1. Give in accordance with Grimm's Law the cognate words in Greek or Latin, or both, of the following:—*foot*, *door*, *tame*, *heart*, *head*, *wit*, *sweet*, *goose*, *hound*, *sit*.

2. Define carefully the grammatical terms:—*tense*, *mood*, *case*, *idiom*, *attraction*, *accusative of cognate meaning*, *dativus ethicus*, *predicative dative*.

3. (*a*) Which of the Greek Dialects most resembled the Latin? Give illustrations. (*b*) Assign to their dialects the following:—(1) μοῦσα, μοῖσα, μῶσα. (2) ἡμεῖς, ὑμμες. (3) τοίς, τώς, τός. (4) νεώς, ναός. (5) ναῦς, νηῦς. (6) ἠνθε, ἤλθε. (7) βήσομαι, βασεῦμαι. (8) ἐκεῖνος, κεῖνος, τήνος.

4. What is meant by the terms *stem*, *inflection*, and *declension*; severally? Illustrate.

5. What are the two great classes into which Latin nouns may be divided according to their case-inflexions?

6. Write down a list of Latin nouns which, when used in the plural, have a special meaning different from their ordinary meaning in the singular.

7. (*a*) What changes in the construction and representation of Attic tragedies are ascribed to Aeschylus, Sophocles, and Euripides, severally? (*b*) Criticise the different styles of these three dramatists.

8. Write explanatory notes on the following words and phrases in their reference to the Greek Drama:—*τραγῳδία*, *χορηγός*, *τὸ θεωρικον*, *χορὸν διδόναι*, *χορὸν διδάσκειν*, *θυμέλη*, *Διονύσια τὰ ἐν ἀστει*, *ἐπίρρημα*.

9. Of what two elements did the Athenian tragic drama consist? What was the origin of Greek comedy? Mention its several stages, specifying the principal writers in each.

10. (*a*) Name and write down the scale of the metre of the following extt., respectively. (*b*) Scan them. (*c*) Introduce the proper accents and breathings.

(1)
τον ιερον χορον δικαιον εστι χρηστα τη πολει
ξυμπαραινειν και διδασκειν. πρωτον ουν ημιν δοκει
εξισωσαι τους πολιτας καφελειν τα δειματα.
κει τις ημαρτε σφαλεις τι Φρυνιχου παλαισμασιν.

(2)
θρευμαι φοβερα μεγαλ' αχη
καθειται στρατος στρατοπεδον λιπων
ρει πολυς οδε λεως προδρομος ιπποτας·
αιθερια κονις με πειθει φανεις,
αναυδος, σαφης ετυμος αγγελος.

11. Give an account of the life and writings af any two of the following authors:—Aristotle, Aristophanes, Plautus, Tacitus.

HISTORY OF GREECE AND ROME.

MONDAY, APRIL 26TH:—MORNING, 9 TO 12.

Examiner, ... REV. GEORGE CORNISH, LL.D.

1. The hegemony of Athens, Sparta and Thebes in the political affairs of Greece;—discuss the events and causes that in each case contributed to its establishment and fall.

2. Give an account of the rise and fall of the Four Hundred at Athens.

3. "Græcia capta ferum victorem cepit;"—illustrate this by reference to the literary history of Rome.

4. How does Mommson, by a comparison of words common to Greek and Latin, determine the character of the civilization of the Greco-Italians before their separation?

5. The constitution and functions under the Republic of the *Comitia Centuriata;* of the *Comitia Curiata;* and of the *Comitia Tributa.*

6. How was the Senate constituted, and what were its functions in the administration of affairs?

7. What was the Ager Publicus? What were the principal laws passed concerning it, and with what consequences, social and political, to the commonwealth?

8. Give an outline of the wars or other events which led to the subjugation as Roman Provinces of Sicily, Spain, Africa, Macedonia, Gaul, Britain. Give dates.

9. Give an account of the state of political parties at Rome at the beginning of the year B. C. 60.

10. The geographical positions of the following places; the historical events connected with them; and the date of each:—Sardis, Corcyra, Potidaea, Delium, Aegates, Phyle, Cannæ, Metaurus, Himera.

MATHEMATICS AND NATURAL PHILOSOPHY.

FIRST YEAR.

EUCLID—ARITHMETIC.

TUESDAY, APRIL 6TH:—MORNING, 9 TO 12.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. In any triangle the square of the side subtending an acute angle is less than the sum of the squares of the sides containing it by twice the rectangle under either of them and the segment contained between the acute angle and the foot of the perpendicular let fall from the opposite angle.

2. A chord of a circle is produced and a right line is drawn from a point on the circle so as to cut the produced part, prove that if the square of this line be equal to the rectangle under the whole produced chord and the external segment, the line must be a tangent.

3. In a given circle inscribe a regular hexagon.

4. If four right lines be proportional the rectangle under the extremes is equal to the rectangle under the means.

a. In a quadrilateral inscribed in a circle the rectangle under the diagonals is equal to the sum of the rectangles under the opposite sides.

5. Find a fourth proportional to three given lines.

6. In equal circles angles at the centre are in the same ratio as the arcs on which they stand.

7. The equilateral triangle described on the hypotenuse of a right-angled triangle is equal to the sum of the equilateral triangles described on the sides.

8. Find the time that the planet Uranus takes to go round the sun from the following data, viz:—The ratio of the square of this time to the square of the time the earth takes (365¼ days) is the same as the ratio of the cubes of their distances from the sun, and the distance of Uranus is 19.18 times the distance of the earth.

9. Reduce the circulating decimal $0.3565\dot{6}$ to a vulgar fraction and verify the result.

10. Divide the difference between $\frac{2}{3}\frac{1}{5}$ and $\frac{4}{7}\frac{3}{7}$ by half the sum of $2\frac{1}{4}$ and $3\frac{1}{3}$.

11. Convert $2056.66 into sterling money—assuming £1 to be equal to $4.86⅔.

12. Find the fourth proportional to 3.68, 4.512 and .0067.

9. Constructing a figure for a *convex* spherical mirror, show that the relation of the distances of a luminous point and its conjugate focus is given by

$$\frac{1}{D} + \frac{1}{d} = \frac{2}{r}$$

a. The radius being 10 inches long; find the position of the conjugate focus when rays fall on the mirror converging to a point 14 inches behind the mirror.

10. The deviation of ray of light in passing nearly perpendicularly through a thin lens is constant, when the distance of the ray from the axis is given.

11. Give a geometrical construction for the path of a ray passing through a thin lens, and prove the truth of it.

12. The refractive index of rock-salt is 1.557; its dispersive power is 0.053; find in minutes and seconds the dispersion produced by a thin prism of the substance of 2° angle when a ray falls nearly perpendicularly on it.

13. Prove the principle of Hadley's sextant.

THIRD YEAR.

FRIDAY, APRIL 2ND:—MORNING, 9 TO 12.

MECHANICS—HYDROSTATICS.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. The velocity acquired by a body in running down an inclined plane is equal to the velocity acquired in falling down the height of the plane.

a. If a body fall down a succession of inclined planes (losing no velocity in passing from one to another) show that the final velocity is the same as that acquired by a body falling down the total height, and hence show that if a body fall along any curve whatever, its velocity at any point depends only on the vertical height through which it has fallen.

2. Find the time of falling down a circular arc which differs but little from a straight line.

3. Define constant force, and prove that

$$v = f\,t,\ s = \tfrac{1}{2}\,v\,t.$$

4. If a force equal to 3 lbs. produce in one second a velocity of 0.317 ft. in a given body, find the quantity of matter contained in the body.

5. Describe the first and second kinds of Burtons, and compare their efficiency when each has 10 movable pulleys.

6. Find the ratio of the Power to the Pressure on the plane in the movable inclined plane.

7. Find the magnitude of the force which causes the liquid to descend in the siphon.

8. Describe the pipette, and the manner of using it.

9. Define the *absolute weight* of a body, and show how it may be found.

10. If two gases having the same temperature be mixed together, prove that

$$V\ p\ s\ =\ V'\ p'\ s'\ +\ V''\ p''\ s''$$

11. Describe Nicholson's Hydrometer, and the method of using it.

a. If the standard weight be 300 grs., calculate the specific gravity of a mineral whose first and second weighings give 25.36 grs. and 102.33 grs.

12. If the elastic force of steam in a boiler be 5½ atmospheres; calculate the pressure on a safety valve whose area is 5.4 square inches.

13. Show that the deviation of the shape of the earth from that of a sphere is a consequence of its rotation on its axis.

B.A. ORDINARY AND THIRD YEAR.

FRIDAY, APRIL 2ND:—AFTERNOON, 2 TO 4.

ELECTRICITY.

Examiner,..... ALEXANDER JOHNSON, LL.D.

1. Describe Sir Wm. Thomson's galvanometer, and the mode of using it.

2. Describe the tangent galvanometer, and prove that the intensity of the current is directly proportional to the tangent of the angle of deviation.

3. Describe the construction of Grove's battery. What is the process of amalgamating the zinc plates, and why is it necessary?

4. In what manner would you ascertain by means of a magnetic needle the direction of the current in a wire from a distant battery?

5. Describe Foucault's regulator for the electric light.

6. A current is sent through a wire and then suddenly cut off, state the effect on a neighbouring conducting wire. Describe the construction of Rhumkorff's Induction coil, and of the mercurial contact breaker used with the larger instruments.

7. Describe the method of proving that in a Leyden jar the electricity is on the surface of the glass both inside and outside, and not on the tinfoil coating.

8. Describe the method of charging a Leyden battery by cascade.

B.A. ORDINARY EXAMINATION.

THURSDAY, APRIL 1ST:—MORNING, 9 TO 12.

ASTRONOMY—OPTICS.

Examiner,..... .....ALEXANDER JOHNSON, LL.D.

1. Investigate a method for determining the ratio of the mass of the Sun to that of the Earth, and calculate it roughly from the knowledge you have of the numerical values of the magnitudes involved.

2. The synodic period of Uranus is 369.65 days; hence calculate his periodic time (proving the formula).

3. Explain the theory of the origin of the November meteors, accounting for the extraordinary showers observed at intervals of thirty-three years.

4. Account for the relative lengths of day and night throughout the year at the equator, the poles, latitude 66° 32′ north, and latitudes less and greater than this last; drawing diagrams to illustrate each case.

5. Account for the phases of the Moon.

6. Define parallax, explaining the necessity for introducing a correction for this. Investigate the formula, and show how the distances of celestial objects can be found if their horizontal parallax be known.

7. State Bode's law connecting the distances of the planets from the Sun, mentioning the historical consequences that followed its announcement.

8. State Newton's error as to the connection between dispersion and refraction, and the cause of it. Explain clearly the bearing of this on the construction of refracting telescopes.

9. Describe the Newtonian telescope.

10. Find the magnifying power of a convex lens of $1\frac{1}{2}$ inch focal length, for two persons whose distances of distinct vision are 10 inches and $5\frac{1}{2}$ inches respectively.

11. Define the centre of a lens, and find it.

12. Rays from a luminous point in air are incident on the surface of water at rest; find the conjugate focus.

13. Show that for a *concave* spherical mirror

$$\frac{1}{D} + \frac{1}{d} = \frac{2}{r}$$

B.A. ORDINARY EXAMINATION.

FRIDAY, APRIL 2ND:—MORNING, 9 TO 12.

MECHANICS—HYDROSTATICS.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. A clock pendulum whose length is l has its length changed to l' by an increase of temperature, prove, assuming $T = \pi\sqrt{\frac{l}{g}}$, that the error in seconds of the clock in a day due to this cause will be

$$43200\ \frac{l' - l}{l}$$

2. Assuming the earth's equatorial radius to be 20923596 feet and the number of seconds in a sidereal day to be 86164, prove that the force of the earth's attraction, uninfluenced by rotation, is 289 times the centrifugal force at the equator.

3. Describe Galileo's method for experimentally verifying the Laws of Motion.

4. Find the velocity acquired by a body falling through a space of 216.171 feet at Sierra Leone (g=32.0927.)

5. Describe the Burton of the second kind, and prove that if it have n cords, $W = 3^n P$.

6. In the screw find the ratio of the power applied at the end of the lever to the resistance parallel to the axis.

7. The resultant of two forces is 56 lbs., and one of the forces is 22lbs.; they make an angle of 15°; find the other component.

8. Describe the safety-tube.

9. In an air-pump where the volume of the receiver and leading-tube is three times that of the pump, find the number of strokes necessary to produce a rarefaction of $\frac{1}{100}$.

10. Describe the suction and lifting pump, and calculate the pressure borne by the piston, if the diameter be 3 inches and the height of the water in the head of the pump be 20 feet above the well.

11. Find the height of a mountain from the following observations :—
Height of barometer at sea-level, 30.045; temp. 77° 5 Fah.
" " upper station, 23.660; " 70° 5 Fah.

12. If 100 cubic inches of dry air at the temperature 60° Fah., and pressure 30 inches, weigh 31.0117 grains, prove that the weight in grains of a given volume of dry air is

$$W = \frac{5.375\ V p}{460 + t}$$

13. Assuming the formula of the previous question, and taking the specific gravity of aqueous vapour as .622, find the weight of a cubic foot of moist air at the temp. 60° Fah., whose pressure is 29.56, the pressure of the aqueous vapour being 0.43.

SPECIAL EXAMINATION IN MATHEMATICS AND NATURAL PHILOSOPHY.

(STUDENTS IN ENGINEERING.)

MONDAY, APRIL 26TH:—MORNING, 9 TO 12.

Examiner, ...ALEXANDER JOHNSON, LL.D.

1. Assuming the refractive index of air at the temperature 50° and pressure 29.96 to be 1.0002836, calculate the amount of refraction for a star whose apparent zenith distance is 53° 44′ 24″.60, and find the true zenith distance.

2. If the star in the previous question were on the meridian of a given place and between the zenith and pole, and its declination be 74° 45′ 37″.79, find the latitude of the place.

3. If Montreal and New York were on the same meridian, what would be the length of a direct road between them, supposing the latitudes to be 45° 31′ N. and 40° 42′ N. respectively.

4. Assuming

$$\sin a = a - \frac{a^3}{1.2.3} + \frac{a^5}{1.2.3.4.5} \&c.$$

where a is the circular measure of the angle, prove the following approximate formula for finding the length of the chord (c) of a small angle subtended by an arc a of a circle whose radius is r

$$c = a \left(1 - \frac{a^2}{24\, r^2}\right)$$

5. A base line 500 yards long is measured on one side of a river, and the angles made with it at its two ends by lines drawn to a house on the opposite side of the river are found to be 79° 22′ and 54° 23′; find the distance of the house from the first end.

6. A beam 18 feet long is supported at both ends, a weight of one ton is suspended at 3 feet from one end and another weight of 15 cwt. at 8 feet from the other end, find the pressure at each point of support.

7. If the force required to overcome friction on a horizontal railroad be 10 lbs. per ton, find the horse power of the locomotive that would be required to draw a train weighing 45 tons up an incline of 1 in 56 at the uniform speed of 30 miles an hour.

8. A raft 30 yards long by 20 yards broad and 16 inches deep is made of wood whose specific gravity is 0.6, what weight will it support without sinking.

9. On the lever of a safety valve a weight of 28 lbs. is placed at a distance of 9 inches from the valve; the diameter of the valve is 2½ inches, the distance of the valve from the fulcrum is 3 inches, calculate the *effective* pressure on the sq. inch.

EXAMINATIONS FOR HONOURS.

FIRST YEAR.

GEOMETRY.

FRIDAY, APRIL 23RD:—MORNING, 9 TO 12.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. Reciprocate the theorem that the three perpendiculars of a triangle meet in the same point.

2. If a system of circles have a pole and polar in common they shall have the same radical axis.

3. If any point outside a circle be joined to the vertices of any circumscribed quadrilateral, and two tangents drawn from the point, these six lines form a pencil in involution.

4. Describe a circle touching three given circles, and show that eight circles can be drawn fulfilling this condition.

5. The radical axes of each pair of a system of three circles meet in a point.

6. The straight lines joining the opposite angles of any hexagon circumscribed to a circle are concurrent.

7. Two co-polar triangles are also co-axial.

8. Any three straight lines drawn through the angles of a triangle so as to intersect in the same point, divide the opposite sides into segments, such that the segments of any side are on a ratio compounded of the ratio of the segments of the other two sides.

9. Given the rectangle under the sides, the bisector of the base and the difference of the base angles; construct the triangle.

10. Given the base of a triangle, the sum of its sides, and the locus of its vertex a fixed straight line; construct the triangle.

11. The feet of the perpendiculars let fall from any point on circumference of a circle to the sides of an inscribed triangle, lie in the same straight line.

12. Given the base and vertical angle of a triangle, find the locus of the centre of the inscribed circle.

FIRST YEAR.

ALGEBRA.

MONDAY, APRIL 26TH:—MORNING, 9 TO 12.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. Break up by the method of Indeterminate Coefficients the fraction $\frac{3x^2 7x + 6}{(x-1)^3}$ into its partial fractions.

2. Sum the series

$$1^3 + 2^3 + 3^3 + \ldots + n^3$$

3. At an election, where every voter may vote for any number of candidates provided it do not exceed the number to be elected, there are 6 candidates and 4 are to be chosen; in how many ways may a man vote.

4. The sum of three consecutive terms in Harmonical Progression is $1\frac{1}{7}$ and the first term is $\frac{1}{2}$; find the series.

5. Prove that in a Geometric Progression

$$l(s - l)^{n-1} - a(s - a)^{n-1} = 0$$

6. If a men or b boys can dig m acres in n days, find the number of boys whose assistance will be required to enable $a-p$ men to dig $m+p$ acres in $n-p$ days.

7. Solve the equations,

$$\sqrt[4]{a+x} + \sqrt[4]{a-x} = b;$$
$$x^2 - xy = 6,\ x^2 + y^2 = 61.$$

8. Divide 14332216 by 6541 in the septenary scale.

9. An annuity £ A is to commence at the end of p years and to continue q years; find the equivalent annuity to commence immediately and to continue q years.

10. Prove the rule for the conversion of a circulating decimal in which there are P figures *not* recurring and Q recurring into a vulgar fraction.

11. Solve by the aid of logarithms, the equation

$$c^{mx} = a\,b^{nx-1}$$

12. Prove that the difference between any number in the denary scale and that formed by reversing the order of the digits is divisible by 9.

B. A. EXAMINATION FOR HONOURS.

LUNAR THEORY—NEWTON'S PRINCIPIA.

TUESDAY, MARCH 30TH:—MORNING, 9 TO 1.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. The centre of gravity of the earth and moon describes relatively to the sun, an orbit very nearly in one plane and elliptic.

2. Investigate the differential equation of the moon's latitude.

3. Calculate the values of P, T, and S, neglecting quantities of the fourth order.

4. Solve the equation found in question 2 to the first order and interpret the result.

5. Explain how and why the result in the last question must be modified in order to proceed to a higher degree of approximation.

6. Find the values of $\frac{T}{h^2u^3}$ and $\frac{Ps-S}{h^2u^3}$ as far as is necessary for the solution of the equation for the latitude to the second order.

7. Solve the differential equation for the latitude to the second order.

8. Calculate g to the third order, viz:

$$g = 1 + \tfrac{3}{4}\, m^2 - \tfrac{9}{32}\, m^3$$

9. Taking the above value of g and considering

$$s = k \sin (g\theta - \gamma)$$

find the period of revolution of the moon's nodes in days.

10. Explain the manner in which the value of the solar parallax is found when the solution of the differential equations is carried out to a higher degree of approximation than the second order.

11. Find the difference between the forces required to make a body move round a centre of force in a revolving orbit and in the same orbit at rest.

12. A body revolves about a centre of force in an orbit nearly circular, find an approximate value of the apsidal angle.

Hence show that the effect of the central disturbing force on the motion of the apsides of the moon's orbit during a whole revolution is to make them progress, the orbit being supposed nearly circular.

13. Consider the effect of the central disturbing force on the eccentricity of the moon's orbit in Newton's manner.

14. A body revolves in a parabola under the action of a force tending to the focus, find the law of the force.

MECHANICS.

MONDAY, APRIL 12TH:—MORNING, 9 TO 12.

(FIRST PAPER.)

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. A body is rotating with a given angular velocity round a given axis passing through the origin, find the components of the linear velocity of any given point of it, and hence show that the rotation may be decomposed into three other rotations.

2. Show that the motion of a body having a fixed point in it is equivalent at any instant to a motion of rotation round an instantaneous axis; and find (1) the component linear velocities of any point of it referred to a system of three rectangular axes *fixed in the body*: (2) the component accelerations of the same point.

3. Find Euler's equations for the motion of a rigid body round a fixed point.

4. A cylindrical surface of any form rests in stable equilibrium on another perfectly rough cylindrical surface, the axes of the cylinders being parallel, a small disturbance being given to the upper surface, find the time of a small oscillation.

5. Define and prove the existence of the *Invariable plane* for a system in motion, where there are no external forces, and show how the position of this plane in the solar system might be found.

6. Four equal rods, each of length $2a$ and mass m, are freely jointed so as to form a rhombus. The system falls from rest with a diagonal vertical, under the action of gravity, against a fixed horizontal inelastic plane. Find the subsequent motion.

7. Investigate the equation of the *momental ellipsoid* for any point of a material system, and show that there are three principal axes at every point at right angles to each other.

8. If a be the semi-axis of a double equi-convex lens and b the radius of the circular intersection of the two surfaces, prove that the radius of gyration k is given by

$$k^2 = \frac{1}{10} \frac{a^4 + 5\,a^2\,b^2 + 10\,b^4}{a^2 + 3\,b^2}$$

9. Show that the times in which a circular plate will vibrate round a horizontal tangent and round a horizontal axis through the point of contact, at right angles to the tangent, are to one another as

$$\sqrt{5} : \sqrt{6}$$

10. Apply D'Alembert's principle to determine the motion of the weights and tension of the strings when one body draws up another on the wheel and axle.

11. A cylinder descends a perfectly rough inclined plane by the action of gravity, its axis being horizontal; determine the motion of the cylinder and the friction at any time of the descent.

12. Define *centre of percussion*. Determine the conditions that there shall be a centre of percussion in a body capable of turning freely about a fixed axis and find its position.

MECHANICS.

MONDAY, APRIL 12TH :—AFTERNOON, 2 TO 5.

[SECOND PAPER)

Examiner,..... .....ALEXANDER JOHNSON, LL.D.

1. State the physical hypothesis in the investigation of the equation which determines the motion of the air in a straight tube, when a disturbance is given to a portion of it in such a way that all the particles in any section perpendicular to the axis, are under the same initial circumstances of displacement, and show that the equation is

$$\frac{d^2\phi}{dt^2} = a^2 \frac{d^2\phi}{dx^2}$$

2. Write down the integral of the above equation and thence determine the nature of the vibration of the air in a tube closed at one end.

3. A vessel kept constantly full of water has a horizontal orifice in its base, find the velocity with which the fluid issues from the orifice—point out how the *continuity* of the fluid is expressed in the investigation.

4. A vessel in the form of a circular cylinder, the curved surface of which is flexible, contains fluid; the axis of the cylinder being vertical, it is required to find the relation between the pressure and the tension at any part.

5. Two particles m, m', connected by a rigid rod are forced to move one on each of two straight lines in a vertical plane, inclined at angles α, α, to the vertical; determine the time of a small oscillation about the position of equilibrium.

6. Investigate the effect of a small tangential disturbing force on a pendulum vibrating in a circle.

7. A particle moves in a plane, under the action of a central force directed to a point which moves in a given manner in the plane; the force varies directly as the distance, find the motion.

8. Find the condition to which the applied force must be subject when the *vie viva* of a particle depends on its position only.

9. Prove that the attraction of a homogeneous *prolate* spheroid of small eccentricity on a particle at the equator is

$$\tfrac{4}{3}\,\pi\,\rho\,(1 - \tfrac{3}{5}\,\varepsilon)\,c$$

$2c$ being the axis of revolution of the spheroid.

10. Find the attraction of a homogeneous oblate spheroid upon a particle within its mass, the law of attraction being that of the inverse square of the distance.

11. Define the potential V; calculate its value in the case of a spherical shell, the density being a function of the distance from the centre, and thence deduce the attractions (1) on a particle *outside* the shell; (2) *within* the internal surface of the shell; (3) *between* the bounding surfaces of the shell.

12. If V be the potential of any mass M_1, and if M. be the portion of M contained within a closed surface S, prove

$$\iint \frac{dV}{dn}\, dS = -4\pi M.$$

dS being an element of S, dn an element of the normal drawn outwards at S, and the integration being extended to the whole surface S.

GEOMETRY OF THREE DIMENSIONS.

SATURDAY, APRIL 17TH:—MORNING, 9 TO 12.

Examiner,.....ALEXNDER JOHNSON, LL. D.

1. Define *lines of greatest slope*, investigate their differential equation; and find the line which passes through x', y', O, for the quadric.

$$Ax^2 + By^2 + Cz^2 = D.$$

2. Prove that the differential equation of the envelope of a right cone whose axis is parallel to the axis of z, and whose vertex moves along any assigned curve in the plane of $x\ y$ is $p^2 + q^2 = m^2$.

3. If the equation of a movable surface contain three constants connected by two relations, show that the partial differential equation of its envelope is

$$Rr + 2\,Ss + Tt + U(rt - s^2) = V$$

where R, S, T, U, V, are connected by the relation

$$RT + UV = S^2.$$

4. Prove that every curve has an infinity of evolutes which lie on the polar developable and are geodesics on it.

5. Prove the following expression for the radius of curvature at any point of the section of any surface made by a plane parallel to *any* given plane, where ϕ is the angle between the normal to the surface and the normal to the section; α, β, γ, are the direction cosines of the trace of the section on the tangent plane, and a, b, c, &c., have the same signification as in the text-book

$$\rho = \frac{\cos\phi\ \sqrt{L^2 + M^2 + N^2}}{a\cos^2\alpha + b\cos^2\beta + c\cos^2\gamma + 2\,l\cos\beta\cos\gamma + \&c.}$$

6. Define the surface of centres and show that the tangent planes to it at the two points where any normal cuts it, cut each other at right angles.

7. For any point on a surface all the polar surfaces touch the tangent plane at that point.

8. If a right line lie altogether in a surface it will touch the Hessian.

9. If at any point on a quadric a line be drawn touching the surface and through that line two tangent planes to any confocal quadric, these two planes will make equal angles with the tangent plane at the given point on the first quadric.

10. Prove fully that the equation of the focal lines of the cone

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} \quad \frac{z^2}{}$$

$$\text{is} \frac{x^2}{a^2 - b^2} - \frac{z^2}{b^2 + c^2} = 0$$

11. Find the locus of the poles of the tangent planes of one quadric with respect to another.

12. The parallelopiped whose edges are three conjugate semi-diameters of an ellipsoid has a constant volume.

MONDAY, APRIL 26TH:—MORNING, 9 TO 12.

CALCULUS.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. Find the solution of the equation.

$$\frac{d^2u}{dx^2} - \frac{i\,(i+1)}{x^2}\,u \pm q^2 u = 0$$

where i is an integer.

2.—Find by the symbolical method the solution of the equation

$$\frac{d^2u}{dx^2} - 5\,\frac{du}{dx} + 6\,u = \varepsilon^{2x}$$

3. Integrate by Monge's method the equation

$$x^2\,r + 2\,x\,y\,s + y^2\,t = 0.$$

4. Integrate the equation of conical surfaces

$$(a - x)\,p + (b - y)\,q = c - z.$$

5. Find the complete and the general primitive and also a singular solution of the equation $z = p\,q$.

6. Find the solution of the equations

$$\frac{d^2x}{dt^2} - 3x - 4y + 3 = 0.$$

$$\frac{d^2y}{dt^2} + x - 8y + 5 = 0.$$

7. Find the general solution of the system of equations

$$\frac{dx}{X} = \frac{dy}{Y} = \frac{dz}{Z}$$

where

$$X = ax + by + cz + d$$
$$Y = a'x + b'y + c'z + d'$$
$$Z = a''x + b''y + c''z + d''.$$

8. Find the orthogonal trajectory of the system of ellipses defined by

$$\frac{x^2}{a^2} + \frac{y^2}{b^2} = 1.$$

where b is the variable parameter.

9. Deduce both the singular solution and the complete primitive of the differential equation

$$y = px + \sqrt{b^2 + a^2 p^2}$$

and interpret each as well as the connexion of the two, geometrically.

10. Transform the double integral

$$\iint e^{x^2 + y^2}\, dx\, dy$$

into one where r and θ are the independent variables, having given

$$x = r \cos\theta \qquad z = y \sin\theta.$$

11. Eliminate the arbitrary functions ϕ and ψ from

$$z = \phi(ay + bx). \quad \psi(ay - bx).$$

12. Trace the curve

$$xy^2 + 2a^2 y - x^3 = 0.$$

EXPERIMENTAL PHYSICS.

Monday, April 26th:—Afternoon, 2 to 5.

Examiner, ... Alexander Johnson, LL.D.

1. A series of waves of light diverging from a point, falls upon two plane mirrors inclined to one another at a very small angle, and is then received upon a screen; investigate the intensity of the illumination upon different parts of the screen.

2. If a piece of thin glass be interposed in the path of one of the pencils of light in the above experiment, show that the fringes will be shifted, and explain how this may be used in deciding between the emission and wave theories of light.

3. Light diverging from a centre is allowed to pass through a small aperture and received on a screen; investigate the illumination on different parts of the screen, as far as the formation of the integrals.

4. Explain clearly the mode of formation of spectra by gratings, and the method of determining thence the lengths of the waves of light.

5. Describe the phenomena of *thick* plates and account for them.

6. A thin crystalline plate is placed between two Nicol's prisms, and the prisms are turned to produce the phenomena of colour. Explain these, showing the special functions of each part of the apparatus.

7. Account for the phenomena of rotary polarization in rock crystal, and describe the experimental verification of the theory.

8. Describe Senarmont's experimental method of showing the difference of conductivity for heat of crystals in different directions.

9. Describe Dulong and Petit's method of determing the coefficient of the *absolute* expansion of mercury.

10. Describe the method of mixtures for determining the specific heat of bodies.

11. Describe the principle of Wheatstone's Balance, and mode of using it in determining electrical conductivity.

12. Describe fully the mode of using Coulomb's Torsion Balance for determining the laws of attraction or repulsion of electrified bodies.

EXAMINATION FOR THE ANNE MOLSON MATHEMATICAL PRIZE, 1874.

GEOMETRY OF THREE DIMENSIONS.

FRIDAY, DECEMBER 18TH:—MORNING, 9 to 12.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. If there be a plane curve common to three quadrics, each pair must have also another common plane curve, and the three planes of these last common curves, pass through the same line.

2. The sections by any plane of two reciprocal cones, having a common vertex, are polar reciprocals with regard to the foot of the perpendicular on that plane from the common vertex.

3. Find the surface of revolution generated by a right line turning round a fixed axis which it does not intersect.

4. Prove that the hyperboloid of one sheet has two systems of right lines lying on it; that any two lines belonging to opposite systems lie in the same plane; and that no two belonging to the same system lie in the same plane.

5. Form the quadratic which gives the lengths of the axes of the section made by any plane passing through the centre of a quadric, viz.

$$\frac{a^2 \cos^2 \alpha}{a^2 - r^2} + \frac{b^2 \cos^2 \beta}{b^2 - r^2} + \frac{c^2 \cos^2 \gamma}{c^2 - r^2} = 0.$$

6. The sum of the squares of the projections of three conjugate diameters of an ellipsoid on any line is constant.

7. Show that in transforming from one set of rectangular axes to another certain functions of the co-efficients in the equation

$$ax^2 + by^2 + cz^2 + 2\,lyz + 2\,mzx + 2\,nxy = d$$

will remain unchanged, and thence deduce a means of reducing the equation to the form

$$\alpha\, x^2 + \beta\, y^2 + \gamma\, z^2 + d$$

a. Apply this to the equation

$$ayz + bzx + cxy + abc = 0.$$

where, a, b, and c are positive quantities, showing that the discriminating cubic must have two negative roots and one positive, and that therefore this equation represents an hyperboloid of one sheet.

8. Define a principal diametral plane, and show that a quadric has in general three.

9. If a section of a quadric be made by a plane through any point, the polar of that point with regard to the section will be the intersection of the plane of section with the polar plane of the given point.

10. Find the condition for intersection of the two lines

$$\frac{x - x_1}{a_1} = \frac{y - y_1}{b_1} = \frac{z - z_1}{c_1};$$

$$\frac{x - x_2}{a_2} = \frac{y - y_2}{b_2} = \frac{z - z_2}{c_2}$$

11. Find the condition that the three lines

$$\frac{x}{a_1} = \frac{y}{b_1} = \frac{z}{c_1}; \quad \frac{x}{a_2} = \frac{y}{b_2} = \frac{z}{c_2}; \quad \frac{x}{a_3} = \frac{y}{b_3} = \frac{z}{c_3};$$

should lie in one plane.

12. Find the direction cosines of the line perpendicular to the two given lines

$$\frac{x}{a_1} = \frac{y}{b_1} = \frac{z}{c_1}; \quad \frac{x}{a_2} = \frac{y}{b_2} = \frac{z}{c_2}$$

CALCULUS.

FRIDAY, DECEMBER 18TH:—AFTERNOON, 2 to 5.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. Find the condition (necessary and sufficient) that

$$M\,dx + N\,dy$$

be an exact differential.

2. Integrate the homogeneous equation:

$$\left\{ y + \sqrt{x^2 + y^2} \right\} dx - x\,dy = 0.$$

3. Integrate the equation

$$\frac{dy}{dx} + Py = Q$$

where P and Q are functions of x.

4. The equation

$$(3x^2 + 6xy + 3y^2)\,dx + (2x^2 + 3xy)\,dy = 0$$

admits of an integrating factor which is a function of x only. Determine it (investigating the general condition that this should be the case) and integrate the equation.

5. Integrate the equation

$$y = p^2 + 2p^3$$

where $p = \frac{dy}{dx}$.

6. Integrate

$$y\frac{dy^2}{dx^2} + \left(\frac{dy}{dx}\right)^2 = 1.$$

7. Find the complete solution of the equations

$$(5y + 9z)\,dx + dy + dz = 0;\ (4y + 3z)\,dx + 2\,dy - dz = 0.$$

8. Show, by the calculus or otherwise, that the curve

$$x^4 - ay\,x^2 + by^3 = 0$$

has a triple point at the origin, and find the angles which the tangents at it make with the axes. Trace the curve.

9. Trace the curve

$$y = x\left(\frac{x - 2a}{x - a}\right)$$

10. Transforming

$$\frac{du^2}{dx^2} + \frac{du^2}{dy^2} + \frac{du^2}{dr^2} = 0$$

to polar co-ordinates, the result is

$$r\frac{d^2(ru)}{dr^2} + \frac{1}{\sin^2\theta}\cdot\frac{d^2u}{d\varphi^2} + \frac{1}{\sin\theta}\frac{d}{d\theta}\left(\sin\theta\frac{du}{d\theta}\right) = 0$$

11. Assuming the equations of the cycloid

$$y = a(\theta + \sin\theta);\ x = a(1 - \cos\theta),$$

find the solid generated by the revolution of the cycloid round its axis.

12. The length of any given arc of the cycloid is equal to twice the chord of the arc of the generating circle corresponding to the given arc.

MECHANICS.

SATURDAY, DECEMBER 19TH:—MORNING, 9 TO 12.

Examiner.....ALEXANDER JOHNSON, LL.D.

1. In the motion of a free system of particles subject only to their mutual attractions, the sum of the products of the mass of each particle of the system, into the area swept out by the radius vector of its projection on any plane, and about any point in that plane, will be proportional to the time.

2. Two smooth spheres moving in given directions and with given velocities impinge; determine the subsequent motion.

3. A particle moves in a plane, under the action of a central force directed to a point which moves with uniform acceleration, parallel to a given direction; the force varies directly as the distance: find the motion.

4. If a particle, subject to no forces, move from one point to another of a smooth surface, the length of the path described will be a maximum or a minimum.

5. A particle moves in a resisting medium under the action of a given force always tending towards a fixed centre; it is required to determine the law of resistance when the path of the particle is given.

6. A particle describes the arc of a cycloid under the action of a force parallel to its base; find the law of the force.

7. A system of forces acting in one plane and represented by the sides of a polygon is equivalent to a couple the moment of which is represented by twice the area of the polygon.

8. Two equal weights are suspended at the extremities of a flexible string hanging over a smooth curve in a vertical plane, find the pressure at any point of the curve, the weight of the string being reckoned inconsiderable.

9. An elastic string of variable thickness is extended by a given force; nd the whole extension.

10. Find the general equation to the curve in which a flexible and inextensible string will lie when acted on at every point by any forces lying in one plane.

11. Find the ratio between the Power and Resistance in the case of the Screw when Friction is taken into account.

12. Give an account of Lagrange's proof of the principle of Virtual Velocities.

ASTRONOMY—OPTICS—HYDROSTATICS.

SATURDAY, DECEMBER 19TH:—AFTERNOON, 2 TO 5.

Examiner,.....ALEXANDER JOHNSON, LL.D.

1. If t be the time reckoned from perihelion in a parabolic orbit, p the distance from perihelion, and v the true anomaly, prove

$$t = \frac{p^{\frac{3}{2}}}{\varpi\sqrt{2}} \left(\tan\frac{v}{2} + \frac{1}{3}\tan^3\frac{v}{2} \right)$$

2. If the mean longitude of a planet at the commencement of the time t be ε, n the mean daily motion in the orbit, ϖ the longitude of the perihelion, and l the true longitude (in orbit), prove

$$l = nt + \varepsilon + \left(2e - \frac{e^3}{4}\right)\sin(nt + \varepsilon - \varpi) + \frac{5}{4}e^2 \sin 2(nt + \varepsilon - \varpi) + \frac{13}{12}e^3 \sin 3(nt + \varepsilon - \varpi) + \&c.$$

3. Give an account of the method of deducing the sun's parallax from observations on Mars at opposition.

4. If D and D' be the measured lengths of two degrees of the same terrestrial meridian, whose middle points are in latitudes ϕ_1 and ϕ_2, and e be the *compression*, prove that approximately

$$e = \frac{D' - D}{2(D' - D) - 3(D' \sin^2\phi_1 - D \sin^2\phi_2)}$$

5. Find the effect of refraction on the rising or setting of a star.

6. A ray of light passes through a medium the value of μ at any point of which varies inversely as the square root of its distance from a fixed point; prove that the path is a parabola of which the focus is a fixed point.

7. Find the geometrical focus of a pencil of rays after direct refraction through a series of lenses, separated by finite intervals, whose axes are coincident.

8. Calculate the position and dimensions of the circle of least confusion of a small oblique pencil reflected at a spherical surface.

9. Find the ratio of the mass of the atmosphere to the mass of the earth from the following data :

Height of barometer = 29.9 inches.
Rad. of earth = 4000 miles.
Sp. gr. of mercury = 13.51
Mean Sp. gr. of earth = 5.5.

10. Water is poured into a hollow sphere, determine the depth of the water when the resultant pressure is half the total normal pressure.

11. A solid bounded by a paraboloid of revolution and a plane perpendicular to its axis at the distance a from the vertex is immersed with the axis vertical and vertex downwards in a fluid of three times of its own density; find the depth to which it is sunk when in equilibrium.

12. Divide a hollow sphere just filled with fluid by a circle parallel to the horizon into two parts which shall be equally pressed.

ENGLISH AND RHETORIC.

FIRST YEAR.

ENGLISH LANGUAGE AND LITERATURE.

TUESDAY, APRIL 13TH :—MORNING, 9 TO 12.

Examiner,.....VEN. ARCHDEACON LEACH, D.C.L.

1. Mention the principal differences in regard to inflexion, between the Anglo-Saxon and Semi-Saxon, between the Semi-Saxon and the early English.

2. Give the dates of the different periods of our philogical history.

3. Mention the principal causes by which changes in a language are brought about.

4. How are the Gothic and the Classical groups of European languages divided ?

5. Why are the English said to occupy, in the nations of Europe, a philological station somewhat anomalous ?

6. What proportion of Anglo-Saxon words have we lost ? Describe the classes.

7. Into what different groups may the literature of the Middle Ages be divided relatively to those addressed ?

8. Mention the points of resemblance between the Poem of Caedmon and the Paradise Lost.

9. Give some account of the literary productions of Lydgate.

10. Mention the principal historical conditions that in the fifteenth century were in England unfavorable to the cultivation of learning.

11. Give some account of the revival of classical learning on the continent in the fifteenth century.

12. Give the substance of the remarks on the works of Chaucer generally.

13. Mention the subject-matter of "The Prioresses Tale."

14. Mention the principal works of Gower, and give the subject-matter of "The Envious Man and the Miser."

15. What are the chief things worthy of notice in the composition called the "Ormulum?"

16. Give some historical account of the "Lays of Marie of France."

17. Mention the principal Latin historians of the 13th century, with critical notices of their works.

18. Translate and parse the following passage:—"Tha he forth on thaet leoht com, tha beséah he hine underbaec, with thaes wifes: jtha losede héo him sona. Thas spell laerath gehwylcne man thaet he hine ne besio to his oaldum yfelum, swa' thaet he hi fullfremme, swa he hi aer dyde."

INTERMEDIATE EXAMINATION.

ENGLISH LANGUAGE AND LITERATURE.

TUESDAY, APRIL 13TH :—MORNING, 9 TO 12.

Examiners, ... { VEN. ARCHDEACON LEACH, D.C.L.
REV. JOHN COOK, D.D.

1. Point out the peculiar character of Anglo-Saxon Literature.

2. Describe the versification of Anglo-Saxon poetry.

3. Give some account of the Romances of Chivalry. Describe more particularly the Romances of the Round Table, and give an outline of their story.

4. Give an outline of the Visions of Piers Plowman.

5. Give some account of the Canterbury Tales.

6. State the points of evidence adduced in regard to the subject of dialectic differences in Anglo-Saxon.

7. As to the question in regard to the dialects whence the standard English had its birth, what is the most probable hypothesis?

5. (*a*) What is meant by a Mental Power? (*b*) Define Faculty and Capacity.

6. Sketch Hamilton's classification of the Cognitive Faculties.

7. Distinguish the qualities of Matter, as contemplated from the point of view of Sense and from that of the Understanding.

8. (*a*) Define the Secundo-Primary qualities of Matter, and (*b*) state their main divisions.

9. State Hamilton's arguments to prove the existence of Latent Modifications of Mind.

10. What facts prove that there are Organs of Imagination, as well as of Sense?

11. Mention certain Primary Acts of Comparison, which are involved in all knowledge.

12. State the different theories on the Primum Cognitum, mentioning which is Hamilton's.

13. What are the essential characters of *A priori* Cognitions?

14. (*a*) Explain Hamilton's doctrine of the Conditioned, (*b*) distinguishing the two extremes of the Unconditioned, and (*c*) showing that Knowledge cannot be co-extensive with Faith.

HONOUR EXAMINATIONS IN MENTAL AND MORAL PHILOSOPHY.

THIRD YEAR.

THOMSON'S OUTLINE OF THE LAWS OF THOUGHT.

MONDAY, APRIL 26th:—MORNING, 9 to 12.

Examiner,.....J. CLARK MURRAY, LL.D.

1. Distinguish Intuitions and Conceptions.

2. State the various steps in the formation of Conceptions.

3. Explain the three powers of a Conception, and the three corresponding logical processes.

4. Explain Thomson's doctrine of Relation in Judgments, contrasting it with the common view in logical textbooks.

5. (*a*) Compare Thomson's Table of Judgments with that of the older Logicians, on the one hand, and with that of Hamilton, on the other. (*b*) State his objections to each of these tables.

6. Distinguish Explicative and Ampliative Judgments, illustrating by an example of each class.

7. Distinguish Immediate and Mediate Inferences.

8. Why does not Thomson recognize A as the Contradictory of O?

9. State the General Canon of Mediate Inference, and the Special Canon of each Figure.

10. Why does Thomson object to the reduction of all Figures to the First?

11. Why does he reject the Fourth Figure?

12. Distinguish the Goclenian and the Aristotelian Sorites.

B. A. EXAMINATION FOR HONOURS.

MILL'S LOGIC, BOOK III.,

AND

THOMSON'S OUTLINE OF THE LAWS OF THOUGHT.

TUESDAY, MARCH 23RD:—MORNING, 9 TO 12.

Examiner,.....J. CLARK MURRAY, LL.D.

1. Explain generally what Induction is, discussing specially the questions, whether (*a*) the ordinary demonstration of geometrical propositions, or (*b*) Kepler's discovery of the path of a planet, may be properly called Induction.

2. Show that the distinction of Agent and Patient is illusory.

3. Why is it not an adequate definition of a cause to say, that it is an *invariable antecedent?*

4. (*a*) State each of the Experimental Methods. (*b*) Illustrate one of them by an example.

5. Explain the characteristic imperfection of the Method of Agreement.

6. (*a*) Point out the difficulties of the investigation, when causes compound their effects. (*b*) Explain in its different stages the Method which is alone applicable in such cases. (*c*) Show that this Method must henceforth be the main instrument of scientific inquiry.

7. On what ground may the hypothesis of a luminiferous ether be objected to, as an illegitimate hypothesis?

8. Explain the nature and value of the evidence of Analogy.

9. (*a*) What sort of uniformities are the properties of kinds? (*b*) Of what nature is the evidence on which they rest?

10. Distinguish the three powers of a Conception, and the varying import of Judgments corresponding to these.

11. Distinguish Explicative and Ampliative Judgments, giving an example of each.

12. Distinguish Mediate and Immediate Inferences, giving an example of each.

13. (*a*) Why does Thomson object to the reduction of all figures to the first? (*b*) Why does he reject the fourth figure?

14. Distinguish the Aristotelian and the Goclenian Sorites.

KANT'S CRITIQUE OF THE PURE REASON.

THURSDAY, APRIL 8TH:—MORNING, 9 TO 12.

Examiner,.....J. CLARK MURRAY, LL.D.

1. Explain the terms, A priori, A posteriori, Pure, Empirical, Transcendental, and Transcendent, as applied to conceptions by Kant.

2. Describe the subjects of the main divisions and subdivisions of the Critique.

3. State the question in which the Problem of the Pure Reason is summed up, and show how it is solved in the Transcendental Æsthetic.

4. (*a*) What is the logical function of the Understanding in general? (*b*) Show how that logical function gives rise to the Pure Concepts of the Understanding, developing the table of these Concepts.

5. Explain the Principle (*a*) of the Axioms of Intuition, (*b*) of the Anticipations of Perception, showing the relation in which each of these Principles stands to the Pure Concepts of the Understanding.

6. Explain the distinction of Phenomena and Noumena.

7. Distinguish the Concepts of the Pure Reason from the Pure Concepts of the Understanding, developing the system of the former.

8. What is meant by (*a*) the Paralogism, (*b*) the Antinomy, (*c*) the Ideal of the Pure Reason.

9. Explain the Cosmological Idea of Freedom, and show how Free Causality is possible.

10. (*a*) Classify the arguments for the existence of a Supreme Being. (*b*) State and discuss the argument on which the others ultimately fall back.

LOCKE'S ESSAY ON THE HUMAN UNDERSTANDING.

SATURDAY, APRIL 17TH :—MORNING, 9 TO 12.

Examiner,.....J. CLARK MURRAY, LL.D.

1. State, in general, the subject of each Book of the Essay.

2. (*a*) What is the great doctrine combated by Locke at the opening of his Essay? (*b*) State some of his objections to the doctrine. (*c*) Criticise his general treatment of the doctrine.

3. Define (*a*) Idea, (*b*) Simple Idea, (*c*) Complex Idea, as used by Locke.

4. Mention (*a*) some ideas derived from sensation alone, distinguishing those given by one sense from those given by more than one, (*b*) some ideas derived from Reflexion alone, (*c*) some ideas derived from both these sources.

5. What is the difference in the action of the mind when receiving Simple Ideas and when forming Complex Ideas?

6. Mention the heads under which all Complex Ideas may be reduced, illustrating each head by an example.

7. Explain (*a*) why ideas in themselves cannot be true or false, (*b*) how falsehood arises.

8. (*a*) What do all words, according to Locke, ultimately express? (*b*) Compare his doctrine with that of recent comparative philology.

9. (*a*) Wherein consists the imperfection of words? (*b*) What are the causes of this imperfection? (*c*) What words partake least, what partake most, of this imperfection?

10. Mention (*a*) some of the abuses of words, (*b*) some of the remedies for their imperfection and abuses.

11. (*a*) Wherein, according to Locke, does knowledge consist? (*b*) What inferences does he draws from this with regard to the extent of our knowledge?

12. (*a*) Sketch briefly Locke's argument on the existence of God. (*b*) To which head of the Kantian classification of these arguments does it belong?

MODERN PHILOSOPHY.

SATURDAY, APRIL 17TH :—AFTERNOON, 2 TO 5.

Examiner, ...J. CLARK MURRAY, LL.D.

1. Mention the causes which contributed chiefly to the rise of modern philosophy.

2. (*a*) Name the philosophers who, in England, Italy, and Germany respectively, became identified with the rise of the modern philosophical spirit. (*b*) Describe briefly their respective tendencies.

3. (*a*) Who is the true originator and father of modern philosophy (*b*) Distinguish him from the English, Italian, and German philosophers referred to in the previous question. (*c*) Sketch briefly the subject-matter of his philosophy, and the course of its development in his own mind.

4. Explain the three fundamental notions on which the philosophy of Spinoza rests.

5. (*a*) Show that the Dualism, inherent in the Cartesian system, is not really removed in that of Spinoza. (*b*) Point out the two antagonistic directions which philosophy consequently took. (*c*) Who were the respective originators of these two directions?

6. (*a*) Sketch the system of Berkeley. (*b*) With what system is it historically, with what is it logically, connected?

7. Describe the respective characteristics of the French and the German Illumination.

8. Describe the method and general divisions of the philosophy of Wolff.

9. Sketch (*a*) Kant's connection with the realistic and idealistic tendencies, (*b*) the main positions of his philosophy, both on its negative and on its positive side.

(B. A. AND THIRD YEAR HONOURS.)

HISTORY OF ANCIENT PHILOSOPHY.

FRIDAY, APRIL 23rd :—MORNING, 9 TO 12.

Examiner,..... .....J. CLARK MURRAY, LL.D.

1. Give a general review of the pre-Socratic Philosophy of Greece.

2. (*a*) Why do historians ascribe certain doctrines to the *Pythagoreans* rather than to *Pythagoras*? (*b*) Mention the most celebrated names in the Pythagorean school. (*c*) What was the locality in which it flourished? (*d*) Describe Pythagoreanism, both on its practical and on its speculative side.

3. Explain the fundamental doctrine of Heraclitus contrasting it with that of the Eleatics, and connecting it with his doctrine in reference to fire.

4. Compare the respective doctrines of Empedocles, Democritus, and Anaxagoras, in reference to the ultimate elements of all things.

5. Describe the relation of the Sophists (*a*) to the previous philosophies, (*b*) to the general life of their own times.

6. Describe the different periods in the development of Plato's philosophy, mentioning one of the most characteristic works representing each period.

7. Sketch the Ethics of Plato, explaining his determination (*a*) of the Sovereign Good, (*b*) of Virtue, (*c*) of the State.

8. Sketch the Ethics of Aristotle in reference to these three points.

9. (*a*) Explain the origin of the names by which the schools of Plato and of Aristotle came to be respectively known. (*b*) Describe the character which the school of Plato assumed in its later history, pointing out the connection of that character with the Platonic spirit.

10. (*a*) From what did the Stoics receive their name? (*b*) Who was their founder? (*c*) Who developed their system into its most systematic shape? (*d*) What Stoical work formed the source of Cicero's *De Officiis?*

11. Compare the Stoical and the Epicurean Ethics.

KANT'S METAPHYSIC OF ETHICS.

FRIDAY, APRIL 23RD :—AFTERNOON, 2 to 5.

Examiner.....J. CLARK MURRAY, LL.D.

1. Explain Kant's doctrine as to what is the only absolutely good thing in the world.

2. (*a*) Define what Kant means by an Imperative, showing that it does not apply to a Will that is absolutely Holy. (*b*) Explain and illustrate the distinction between the three kinds of Imperatives.

3. Show that one of these three kinds of Imperatives implies its contents in its very conception.

4. Explain what is meant by the Autonomy of the Will, distinguishing it from the Heteronomy of Physical Causation.

5. Define Principle, Rule, Maxim, Law.

6. Show that a Practical Law cannot be founded on a Material Principle.

7. Name several systems founded on Material Principles, and show that they all ultimately rest on Self-love.

8. Explain what is the *A priori* Spring of the Will.

FIRST YEAR.

FRENCH.

WEDNESDAY, APRIL 21ST :—MORNING, 9 TO 12.

Examiner,.....P. J. DAREY, M.A., B.C.L.

1. Translate into English :—

Mais vous ne me dites pas que je m'engage insensiblement chaque jour à recevoir de trop grands témoignages de votre passion. J'ai beau me défendre des choses, vous fatiguez ma résistance, et vous avez une civile opiniâtreté qui me fait venir doucement à tout ce qu'il vous plaît. Les visites fréquentes ont commencé, les déclarations sont venues ensuite, qui, après elles, ont traîné les sérénades et les cadeaux, que les présents ont suivis, je me suis opposé à tout cela ; mais vous ne vous rebutez point, et pied à pied vous gagnez mes résolutions. Pour moi je ne puis plus répondre de rien ; et je crois qu'à la fin vous me ferez venir au mariage dont je suis tant éloignée.

MOLIERE, *le Bourgeois Gentilhomme*, A. III., sec. xviii.

2. Give the primitive tenses of all the verbs in the two first sentences ; point out the irregular ones, and give proofs of their irregularity.

3. What character did Molière turn into ridicule in the comedy of le *Bourgeois gentilhomme* ? Which of the two comedies, *les Fourberies de Scapin* or *le Bourgeois Gentilhomme* do you prefer ? Give some reasons for your preference.

4. Write in full the Imperfect Indicative, the Future and Preterite definite of : *faire*, *vous vous tussiez*, *trayez*, *croire* and *croître*.

5. What difference is there between : *Plaindre* and *se plaindre*, *repartir* and *répartir ; convenir* with *avoir* for auxiliary or *être ; moudre* and *émoudre*, *luire* and *reluire ?*

6. State the rule to form the adverb from the adjective ending with a consonant. Give two examples.

7. Translate into English the adverbs : *exprès*, *désormais*, *à tort*, *autrefois ;* the prepositions : *moyenant*, *attendu*, *vu*, and the conjunctions : *jusqu'à ce que*, *savoir*, *soit*.

8. State two cases when the definite article is used in French and not in English ; and two cases when the indefinite article is used in English and not in French. Give four examples.

9. Translate into English : Lorsqu'on a des personnes à faire parler en musique, il faut bien que pour la vraisemblance, on donne dans la bergerie. Quand vous portez la botte, il faut que l'épée parte la première et que le corps soit bien effacé. Notre accueil de ce matin t'a fait prendre la chèvre. On a deviné l'enclouûre.

10. Translate into French : Intemperance and idleness are the two most dangerous enemies of life. Self-love and pride are always the offspring of a weak mind. The Saracens occupied Spain during several centuries. I sailed from Holland for the Cape of Good Hope. Chocolate was brought from Mexico to Europe by the Spaniards. It is dear living in this town. You perhaps think that he is one of your friends; you are mistaken. The makers of almanacs foretell rain and fine weather. Do not say : That man is of one people and I am of another people; for all peoples have had on earth the same father, who was Adam, and have in heaven the same Father, who is God.

INTERMEDIATE EXAMINATION.

FRENCH.

WEDNESDAY, APRIL 21ST :—MORNING, 9 TO 12.

Examiners,..... { P. J. DAREY, M.A., B.C.L.
PROF. M. MILLER.

Translate into French:

1. "What," said he, "makes the difference between man and all the rest of the animal creation? Every beast that strays beside me has the same corporal necessities with myself; he is hungry and crops the grass, he is thirsty and drinks the stream, his thirst and hunger are appeased, he is satisfied and sleeps; he rises again and is hungry, he is again fed and is at rest. I am hungry and thirsty like him, but when thirst and hunger cease I am not at rest, I am, like him, pained with want, but am not, like him, satisfied with fulness. The intermediate hours are tedious and gloomy; I long again to be hungry that I may again quicken my attention. The birds peck the berries or the corn, and fly away to the groves, where they sit in seeming happiness on the branches, and waste their lives in tuning one unvaried series of sounds. I likewise can call the lutanist and the singer, but the sounds that pleased me yesterday weary me to-day, and will grow yet more wearisome to-morrow."—JOHNSON'S *Rasselas*.

2. Translate into English: MOLIERE, L'Avare, Acte I., Scène I., from: Elise. *Ah! Valère, ne bougez d'ici*, to the end of the scene.

Or RACINE, Athalie, Acte II., sc. V., from *Prêtez-moi* to *il me poursuit*.

3. Point out the difference between *j'acquérais* and *j'acquerrais; je courais* and *je courrais je mourais* and *je mourrais*.

4. Translate into French :

He is richer than he was,
He is not richer than he was,
You write better than you speak,
You do not write better than you speak,

and state the rules according to which you have to proceed in these and similar sentences.

5. Show the different ways by which euphony is effected in French, where the pronunciation of two consecutive vowels in two different words would be disagreeable for the ear, and give two examples of each case.

6. Where are the Personal Pronouns direct or indirect objects of the verb, placed in the first person plural, or in either of the second persons of the Imperative, if without a negative? Is the following sentence of Molière expressed according to this rule? Finissons auparavant votre affaire, et me dites qui est celle que vous aimez?" What may be said to explain this order of the words?

7. Translate into French:—To hint, to go halves, to abide by, to long, to set about; and into English: Trouver à redire, il y va de son tout, s'y prendre, s'en rapporter à, à la dérobée.

8. Give a short sketch of Racine's life. Mention the tragedies which he has imitated from Greek authors, those which he has taken from history, and also those he has taken from the Bible. Give a short analysis of his last tragedy, and mention the principal characters.

9. Give a short description of Molière's life. Name those comedies which are considered the best. Point out the weaknesses and faults he ridicules in each of them. Show how he makes avarice hateful and despicable in the person of *Harpagon*.

10. When did *Joinville*, *Christine de Pisan*, and *Philippe de Commines* live? What are the subjects of their writings?

11. What were first theatrical representations in France? To what did they owe their origin?

12. Give the name of four poets, four philosophers, and two authors of memoirs of the XVIth century, with a short notice of the works they have written respectively.

THIRD YEAR.
(ARTS AND SCIENCE.)
FRENCH.

Examiner,.....P. J. Darey, M.A., B.C.L.

Translate into English:

1. J'avais bien calfeutré ma fenêtre: mon petit tapis de pied était cloué à sa place; ma lampe garnie de son abat-jour laissait filtrer une lumière adoucie, et mon poële ronflait sourdement comme un animal domestique. Autour de moi tout faisait silence. Au dehors seulement une pluie glacée balayait les toits et roulait avec de longues rumeurs dans les gouttières sonores. Par instants une raffale courait sous les tuiles qui s'entrefroissaient avec un bruit de castagnettes, puis elle s'engouffrait dans le corridor désert. Alors un petit frémissement voluptueux parcourait mes veines, je ramenais sur moi les pans de ma vieille robe de chambre ouatée, j'enfonçais sur mes yeux ma toque de velours râpé, et, me laissant glisser plus profondément dans mon fauteuil, les pieds caressés par la chaude lueur qui brillait à travers la porte du poële, je m'abandonnais à une sensation de bien-être avivée par la conscience de la tempête qui bruissait au dehors. Mes regards noyés dans une sorte de vapeur erraient sur tous les détails de mon paisible intérieur; ils allaient de mes gravures à ma bibliothèque, en glissant sur la petite causeuse de toile perse, sur les

rideaux blancs de la couchette de fer, sur le casier aux cartons dépareillés, humbles archives de la mansarde! puis, revenant au livre que je tenais à la main, ils s'efforçaient de ressaisir le fil de la lecture interrompue.

E. Souvestre, *Le Philosophe sous les toits.*

2. What is the general character of the French Literature in the XVIIIth century. Compare the French Literature of the XVIIth century with that of the XVIIIth, and state in what they chiefly differ.

3. Name six authors of the XVIIIth century; mention the principal works which they have written.

4. Translate into French:

For some time after my retreat, I rejoiced like a tempest-beaten sailor at his entrance into the harbor, being delighted with the sudden change of the noise and the hurry of war to stillness and repose. When the pleasure of novelty went away I employed my hours in examining the plants which grew in the valley, and the minerals which I collected from the rocks. But that inquiry is now grown tasteless and irksome. I have been from some time unsettled and distracted: my mind is disturbed with a thousand perplexities of doubt, and vanities of imagination, which hourly prevail upon me, because I have no opportunities of relaxation or diversion. I am sometimes ashamed to think that I could not secure myself from vice, but by retiring from the exercise of virtue, and begin to suspect that I was rather impelled by resentment, than led by devotion, into solitude. My fancy riots in scenes of folly, and I lament that I have lost so much and have gained so little. In solitude, if I escape the example of bad men, I want likewise the counsel and conversation of the good. I have been long comparing the evils with the advantages of society, and resolve to return to the world to-morrow. The life of a solitary man will be certainly miserable, but not certainly devout.

Johnson, *Rasselas.*

JUNIOR CLASS.

GERMAN.

Friday, April 23rd:—Morning, 9 to 12.

Examiner, ...C. F. A. Markgraf, M.A.

1. Translate into English:—

„ Das Schloß am Meere" by Uhland.

„ Mignon" by Goethe.

2. *a.* Decline in the Sing. and Plural:—Unſer blauer Himmel; ſpiegelklare Fluth; das hohe Schloß; neues ſeidenes Kleid. *b.* Give the gender, meaning and Nominative Plural of:—Antwort, Pallaſt, Vorhang, Schönheit, Haupt, Beleidigung, Kranz, Kunſt, Schmetterling, Freundſchaft, Ort, Reichthum.

3. *a.* What are *derived* and *compound* verbs? *b.* In which way does the conjugation of *derived* verbs differ from that of *compound* verbs?

4. *a.* Conjugate, giving the 2nd and 3rd Sing. and the 2nd Plural of all Tenses of the Indicative:—ziehen, abnehmen. *b.* Give the Imperfect, Pluperfect and Second Future Ind. (all persons) of:—bringen, reiten, ſprechen.

5. In what construction is the neuter pronoun „es" used for all genders and both numbers?—What other words may be used in the same way?—Give examples.

6. Decline der, die, das, when used for the *relative* pronouns.

7. Give the corresponding *English* idioms of the following sentences:—Laſſen Sie ihn holen. Was wiſſen Sie Neues? Warum machen Sie dieſen Umweg? Er hat eine große Reiſe gemacht. Wir wohnen ſeit zwei Jahren hier. Ich warte ſchon eine Stunde lang. Sie ſind vor drei Vierteljahren abgereiſ't. Wir wußten es ſchon lange, aber wir mochten nichts davon ſagen.

8. *a.* Parse, and give the Present Infinitives of:—wirft, bogſt, ſchienen, vergaßet, bricht, gedacht, fror, verziehen, gibt, laſen, geſtanden. *b.* Give the irregular forms of:—dürfen, verlieren, helfen, zerreißen, ſehen, treiben.

9. How is the Superlative of Adverbs usually formed in German?

10. Illustrate by short examples the use of „in" and „auf", „von" and „aus", „zu" and „nach", when denoting motion.

11. Explain the difference in the use of wann, wenn, and als for *when*.

12. Translate into German:—

The fruit which you see there, is not yet ripe. The children ate the berries which they had found. Have you already seen our good king and queen? My watch stopped this morning, although I wound it last night. These fire-tongs are of bright steel, and those little scissors of good silver. Shut your door when you go out. What where you doing while I was looking at the pictures? The mother reposes with her child by (an, Dat.) the side of the brook. Fetch the chairs which are in the garden under the large lime-tree. Our wise old friend whose advice was always so useful to us, died the other day. The reading of good books strengthens the mind. The merchant cannot show you the wares which you wish (wünſchen) to see, because they have not yet arrived. The happy people in that distant little village did not know (kennen, Imperf.) the value of a gold-piece; the mountains separated them from (the) large towns and their customs.

SENIOR CLASS.

GERMAN.

FRIDAY, APRIL 23RD:—MORNING, 9 TO 12.

Examiner,.....C. F. A. MARKGRAF, M.A.

I. Ueberſetzen Sie ins Deutſche:—

One finds skeletons of immense antediluvian animals in the highest north, as well as shells on the summits of the highest mountains (Gebirge, n.). Within the boundaries of that great realm there are many large cities. The stranger looked into my face without speaking a word. The late minister enjoyed the full confidence of his king till (bis an, Acc.) his death. History calls the emperor Nero a tyrant, and his name is abhorred by all nations. Why did you go away, instead of following us? The young man's conduct is very much to be praised. Do not imagine that! I am astonished at you. I do not repent of the promise (which) I have given him; but I long to fulfil it. When I arrived, I found no one at home. We lived formerly on this side of the river, but now we live on the other side. These things were ours, but at present they are yours.

II. Grammatik.

1. *a.* Konjugiren Sie in allen Arten und Zeiten des Paſſivs das Verb „aufhalten." *b.* Geben Sie die Analyſe und die entſprechenden Zeiten des Paſſivs von:—ihr nahmet an; er begönne; wir haben getroffen; ſie werden verderben; du klärſt auf; ich hätte gefangen.

2. Wann werden Grundzahlwörter flektirt? Geben Sie Beiſpiele.

3. Zeigen Sie den Unterſchied in der Bedeutung zwiſchen:—ich hole wieder und ich wiederhole; er ging um und er umging; ſie ſind uebergangen und ſie ſind uebergegangen; die Briefe waren geſchrieben und die Briefe wurden geſchrieben.

4. *a.* Statt welcher Zeitformen wird oft im Deutſchen das Präſens gebraucht? *b.* Wann erfordert die deutſche Sprachweiſe das Partizip des Präteritums ſtatt des engliſchen Partizips des Präſens? Beleuchten Sie *a* und *b* durch Beiſpiele.

5. *a.* Führen Sie einige konjunktionellen Adverbien an; welche, an die Spitze des Hauptſatzes geſtellt, die invertirte Wortfolge fordern. *b.* Erwähnen Sie einige Präpoſitionen *α.* welche dem Kaſus, den ſie regieren, immer nachfolgen, *β.* welche dem Kaſus vorangehen oder nachfolgen können.

6. Ueberſetzen Sie, mit Vorweiſung der Regel für die deutſche Konſtruktion in jedem beſondern Falle:—they ought to have come—I have not seen him go away—they were thanked by all.

THIRD YEAR.

ZOOLOGY.

THURSDAY, APRIL 15TH:—AFTERNOON, 2 TO 5.

Examiner,.....J. W. DAWSON, LL.D., F.R.S.

1. State fully the distinction between *Alcyonium* and *Actinia*, as types of orders.

2. Explain the Circulation and Respiration in *Homarus* and *Unio*.

3. State the distinctive characters and general classification of *Protozoa*.

4. Describe minutely the structure of *Echinus*.

5. Indicate in tabular form the classes and orders to which the following genera belong: *Terebratula*, *Astræa*, *Serpula*, *Cyanea*, *Lumbricus*, *Tubularia*, *Amœba*, *Nautilus*, *Limulus*.

6. State the characteristic structural differences between Reptiles, Amphibians and Fishes.

7. What are the precise zoological relations of the Trilobites, Belemnites and Dinosaurians.

8. What are the main subdivisions of the Mammals, and how may dentition be used in subdividing these into orders?

9. Explain the embryology of *Cyanea* and *Tænia*, and the relation of this to the classification of the groups to which they belong.

10. Describe the specimens exhibited, and indicate their place in the classification.

B. A. ORDINARY EXAMINATION.

THURSDAY, APRIL 15TH:—MORNING, 9 TO 12.

GEOLOGY.

Examiner,.....J. W. DAWSON, LL.D., F.R.S.

1. State and explain the data for the determination of the relative ages of stratified rocks, and the manner of applying them.

2. State the distribution of the Laurentian and Huronian rocks in North America, and mention their distinctive lithological character.

3. How is the Cambrian of England represented in Eastern America?

4. Explain the peculiarities of the Quebec group, and its geological relations.

5. How would you distinguish by fossils the Trenton Limestone from the Niagara Limestone, and this from the Corniferous?

6. Explain the mode of occurrence of coal, and its distribution in British America.

7. What are the geological relations of the coal of Vancouver's Island and the lignite of the Western Territories.

8. Explain the supposed origin of boulder-clay and the causes of the distribution of boulders.

9. Give in tabular form the subdivisions of the Carboniferous, Trias, and Eocene in Europe.

10. What are the geological relations of the ores of iron, copper and silver in Canada?

11. State the zoological or botanical and geological relations of *Favosites*, *Calamites*, *Productus*, *Ammonites*, *Psilophyton*, *Nummulites*, *Paradoxides*, *Palæoniscus*.

12. Describe the geological formations to which the fossils exhibited belong and name the fossils.

THIRD YEAR.

EXAMINATION FOR HONOURS.

LITHOLOGY.

FRIDAY, APRIL 23rd:— { Morning, 9 to 12. / Afternoon, 2 to 5.

Examiner.....J. W. DAWSON, LL.D., F.R.S.

1. How may rocks be most usefully classified for practical purposes; give the classification, with examples?

2. Explain the derivation of sediments from the waste of granitic rocks.

3. Explain the nature and origin of Conglomerate and Breccia, and the geological conclusions deducible from their structure and material.

4. Explain the nature of Porphyritic structure.

5. State the distinction between Granite, Syenite and Gneiss.

6. What are Basic as distinguished from Acidic Igneous rocks.

7. What are the most important varieties of Schistose rocks?

8. How may Dolomite, Limestone and Gypsum be distinguished?

9. Describe Diorite, Dolerite, Argillite, Ophiolite.

10. Explain the nature and origin of Metamorphism.

Name the Rocks exhibited, Nos. 1 to 12, and explain their origin, and state their constituent minerals and place in the classification.

THIRD YEAR.

EXAMINATION FOR HONOURS.

MINERALOGY.

MONDAY, APRIL 19TH:— { Morning, 9 to 12. / Afternoon, 2 to 5.

Examiner,.....J. W. DAWSON, LL.D., F.R.S.

1. Explain cleavage, and mention its use in determining minerals.

2. Describe the Primary Forms of the Monometric, Trimetric and Hexagonal Systems; and mention some minerals which crystallize in these forms.

3. Mention some minerals readily distinguished by hardness and specific gravity, and give the details.

4. Describe the more important Felspars, with their differences and modes of occurrence.

5. Describe Calcite, Barite, Hornblende and Mica.

6. Explain the terms Pseudomorph, Hemiphedral, Opalescence and Tarnish with examples.

7. By what characters can Talc be distinguished from Mica and Serpentine?

8. State the composition of Chlorite, Garnet and Pyroxene, and in what rocks they occur.

9. Mention the principal varieties of Quartz and describe two of them.

10. Mention some important minerals distinguishable by the following characters:—effervescence with Acids, gelatinizing with Acids, emitting Sulphurous odours before the blowpipe, or uniting monometric crystallization with metallic lustre.

Determine and describe the minerals exhibited, Nos. 1 to 10.

DEPARTMENT OF PRACTICAL AND APPLIED SCIENCE.

FIRST YEAR.

DRAWING.

FRIDAY, APRIL 9TH:—MORNING, 9 TO 12.

Examiner,..... G. F. ARMSTRONG, M.A., C.E.

1. Draw plan and elevation of a cylinder penetrated by a right cone; the axes of the solids meeting at their middle points and at right angles to each

other. The cylinder is 4·5 in. long, and its ends 2 in. diameter: the cone 4 in. high and 3 in. diameter of base; and the axis of the former makes an angle of 45° with the horizontal, and 30° with the vertical plane.

2. Develope the surface of the cylinder projected in 1.

3. Project isometrically, a piece of wood 6 in. long, 3 in. wide, and 1 in. thick, having a hole in the shape of a conic frustrum bored through its thickness in the centre of its length and breadth. The upper diameter of the hole is 1 in., and the lower diameter 2 in.

4. Draw the plan of three spheres of 3, 2, and 1 in. radii resting on the horizontal plane, and in contact, and show, by its *trace*, a plane tangential to all three.

Note.—Lines of construction should be dotted. Neatness and accuracy are essential.

FIRST YEAR.

SURVEYING.

Friday, April 9th :—Afternoon, 2 to 5.

Examiner,.....G. F. Armstrong, M.A., C.E.

1. What are Traverse-tables, and for what purpose used in Surveying?

2. Describe the construction of the Circumferenter, both in its simpler and more complex forms.

3. Upon what principle are the various methods of supplying omissions in a needle survey based?

4. There are two cases in which the Theodolite is found to be invaluable, and to which, in surveying operations, its use is principally confined.—Fully explain the mode of use in each.

5. A line is observed to bear N. 11° 30' W., but the compass-variation is 12° 20' E. What is the true bearing of the line? And will the variation affect the accuracy of a survey?

6. What are the temporary adjustments of the Theodolite, and how made?

7. Explain how to read the Vernier.

8. Describe the method of measuring the base in a large trigonometrical survey, and particularly the various instruments employed.

Note.—In addition to this paper each student plotted two surveys, one original, and the other from notes supplied.

MIDDLE YEAR.

DRAWING.

FRIDAY, APRIL 9:—MORNING, 9 TO 12.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

1. Draw the plan of three spheres of 3, 2 and 1 in. radii resting on the horizontal plane, and in contact, and show, by its *trace*, a plane tangential to all three.

2. Project perspectively, on a scale of 1 in. = 1 ft:—

a. A cone, 8 ft. high and 4 ft. diameter of base, penetrated by a cylinder, 6 ft. high and 1·5 ft. diameter. The axes, at right angles to each other, meet in their middle points. The cone is vertical and placed 6 ft. on the right of the spectator with the front of its base in the foreground, while the axis of the other solid is parallel to the picture plane. The lines of penetration are to be carefully drawn, and the height of eye and picture distance so chosen as to show the object to the best advantage.

b. An octagonal plinth, of 1·25 in. side and 1 ft. high, on which rests an octagonal prism, 1 ft. side and 4 ft. high, the sides of which are parallel to those of the plinth. On this again is placed a pyramid 2 feet high, the basal sides of which coincide with the top edges of the prism. Two sides of the plinth make angles of 30° and 35° respectively with the picture plane, and the included angle is 2 ft. within the picture, and 6 ft. on the left of the spectator. Height of eye and picture distance to be chosen as in *a*.

3. Project isometrically:—

a. A speed pulley composed of four blocks, the diameters of which, taken in order from the top downwards, are 2, 3, 4 and 5 in. The faces of the blocks are vertical, and that of the smallest visible.

b. A cone, 4 in. high and 2 in. diameter of base, in an inverted position, with its axis vertical.

NOTE.—Lines of construction should be dotted. Neatness and accuracy are essential.

MIDDLE YEAR.

SURVEYING AND LEVELLING.

FRIDAY, APRIL 9TH:—AFTERNOON, 2 TO 5.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

1. Describe the Prismatic-compass, and its applications as a surveying instrument.

2. What omissions can be applied in a needle-survey, and how?

3. In a large trigonometrical survey, what are the principal corrections and reductions that it is necessary to make?

4. Explain fully the principal of the Vernier, as applied to the subdivision of both straight lines and arcs.

5. How would you, in the Transit-theodolite, place the telescope-bubble parallel to the line of collimation?

6. What check have you in a closed Traverse upon (*a*) the field-work (*b*) the plotting?

7. Distinguish between apparent and true level, and compute the value of their difference for one mile.

8. Describe minutely the construction of the common Theodolite, pointing out in what respects it differs from the Transit and the Everest forms.

NOTE.—In addition to this paper there was a *viva voce* examination; and each student plotted a plan and section also from notes supplied.

BAC. APP. SC. EXAMINATION.

(ENGINEERING AND MINING COURSES.)

PRACTICAL MECHANICS.

THURSDAY, APRIL 8TH:—MORNING, 9 TO 12.

Examiner,..... G. F. ARMSTRONG, M.A., C.E.

1. The effect of a couple is completely represented by the axis.
Demonstrate the accuracy of Roberval's balance.

2. Enunciate and prove the principle of the concurrence of three balancing forces.

A uniform beam hinged at one end and weighing 100 lbs., rests in a horizontal position under the pull of a weight W attached to a string making an angle of 30° with the beam. Find W and the pressure on the hinge.

3. Explain and illustrate the principle of the Fusee.
In the toggle-joint show that the force exerted becomes infinite when the arms straighten into one line.

4. What is friction? and how is its effect estimated?

A fly-wheel weighs 20 tons and turns on an axle 18 in. in diameter, the coefficient of friction between the axle and its bearing is 0·1. Determine approximately the number of units of work expended on friction in one turn of the wheel.

5. Find the conditions of equilibrium of any number of forces acting in one plane upon different points of a rigid body.

A ladder rests against a vertical wall, to which it is inclined at an angle of 45°; the coefficients of friction of the wall and of the horizontal plane being respectively $\frac{1}{3}$ and $\frac{1}{2}$; and the centre of gravity of the ladder at its middle round. A man whose weight is equal to half that of the ladder, ascends it; find to what height he can go before the ladder begins to slide.

6. If A B be any straight line, A P B any curve, and G the centre of gravity of this curve regarded as a fine material line, then the area of the surface generated by the revolution of A P B about A B as an axis is found by multiplying the length of A P B into the length of the path described by G.

Find the centre of gravity of the area of a semicircle.

7. Find the length of the Catenary.

The centre of gravity of the Catenary is further below the horzontal line of the points of suspension than if the chain assumed any other arbitrary form.

8. Explain the theory of the arch.

The theoretical arch is incapable of sustaining the least possible load.

9. Show how to estimate the pressure of water against a wall or embankment.

A wall of brick weighing 134 lbs. per cubic foot is intended to divide a reservoir. If built 12 feet high and 2 feet thick will it be strong enough, supposing the water to be $10\frac{1}{2}$ feet high on one side, and only 10 feet on the other.

10. Point out the bearing of the Moment of Inertia upon questions involving the estimation of the work stored up in rigid bodies moving in a circular path.

Two balls, each weighing 100 lbs., are placed at the ends of a horizontal bar 5 feet from the centre of motion. The bar imparts motion to a vertical screw of 2 in. pitch working a punch, as in the ordinary punch-press. What resistance will the punch overcome if the balls have a velocity of 10 feet per second at the moment of impact, and the punch is brought to rest after traversing a distance of $\frac{1}{10}$ in. ?

11. If the forces impressed on the several parts of a system, howsoever related, be each resolved into two others, one of which is effective, and the other, from the given conditions, wholly ineffective, then the ineffective resolved forces would, if acting on the system alone, produce equilibrium.

Suppose a cylinder, that weighs 100 lbs., to revolve upon the horizontal axis, and to be set in motion by a weight P of 15 lbs

attached to a string that is coiled round the cylinder; find the space through which the weight descends in 5 seconds. Moment of Inertia of cylinder $= \frac{M r^2}{2}$

12. The centres of oscillation and suspension are reciprocal.

A body vibrates in $2\frac{1}{2}$ seconds; find the distance between its centres of suspension and oscillation.

Bac. App. Sc. EXAMINATION.

(ENGINEERING AND MINING COURSES.)

PRINCIPLES OF MECHANISM.

Friday, April 9:—Morning, 9 to 12.

Examiner.....G. F. Armstrong, M.A., C.E.

1. If the term "line of action" be made to include the "line of direction" in linkwork, the "connector" in wrapping contact, and the "common normal" to the curves in motion by direct contact, how may the velocity ratio of two consecutive pieces be generally expressed?

2. Mention some methods of converting circular into reciprocating motion, and point out how the problem to be solved differs from its converse.

3. Explain how a general system of classification based upon a knowledge of the mode of connection, the velocity ratio, and the directional relationship may be made to include all varieties of pure mechanism.

4. An engine drives a fly-wheel; the crank is 12 in., and the connecting rod 6 feet long. Find the position of the piston when the crank makes an angle of 90° with the line of the dead-points.

5. Explain the behaviour of a driving-strap on a conical pulley, and the object attained by the use of guide-pulleys.

6. Show that the velocity ratio of two pieces, when constant, is correctly ascertained by comparing the entire spaces described by the driver and the follower respectively in the same time, whatever changes the actual velocities may have undergone during that time.

7. The pitch and number of the teeth of a wheel being given, show how the curves of the teeth may be set out by means of the Odontograph.

8. Describe some forms of Quick-return motion, and point out the part they play in machinery.

9. Explain the principle of the parallel-motion as applied to the engines of the S. S. Gorgon, and point out what mechanical advantage it possesses.

10. Why are involute teeth not used in heavy machinery?

11. Show that a double Hooke's-joint may be used to communicate uniform motion from one axis to another inclined to it at a given angle.

12. Explain the following terms:—*shaft, skew-bevil, arbor, face-wheel, cam, escapement, swash-plate, idle-wheel, train-value, hunting-cog.*

BAC. APP. SC. EXAMINATION.

(ENGINEERING COURSE.)

CONSTRUCTION.

(STRENGTH OF MATERIALS.)

MONDAY, APRIL 12TH:—MORNING, 9 TO 12.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

1. Into how many classes dependent upon their natural properties may cementitious materials be conveniently divided?

2. What insight into its qualities does the behaviour of lime, during slaking and setting, give?

3. What are Natural Cements, and upon what peculiarity of constitution does their hydraulic property depend?

4. What are the essential constituents of Portland Cement as made by (*a*) the English, (*b*) the German method?

5. Sketch briefly the English mode of manufacturing Portland Cement?

6. In certain stages of the manufacture, the German is said to possess an economical advantage over the English method. Explain this.

7. What bearing has specific gravity on the qualities of Portland Cement? And how does an admixture of sand affect it?

8. What is the tripple-test, and why necessary? Can you suggest any further test peculiarly applicable to this climate?

9. What are the raw materials from which the different kinds of brick are made?

10. Describe the usual methods of burning bricks, and state the effect that each has upon the quality.

11. Describe fully the process of *tempering* and *moulding* in brick-manufacture.

12. Describe a machine suitable for testing resistances of materials, and explain its mode of action.

NOTE.—Answers should be concise and, as far as possible, illustrated by sketches or diagrams.

BAC. APP. SC. EXAMINATION.

(ENGINEERING COURSE.)

CONSTRUCTION.

(SEWERAGE.)

MONDAY, APRIL 12TH:—AFTERNOON, 2 TO 5.

Examiner,..... G. F. ARMSTRONG, M.A., C.E.

1. Explain briefly the object of such preliminary inquiries as you would think it necessary to undertake before commencing any system of town-drainage.

2. Enter fully into the question of the treatment of the rain-fall of a district.

3. Explain what is meant by an *intercepting system*, as applied to sewerage-works, and point out any advantages that attend its adoption.

4. What considerations govern the size to be given to a sewer in order that it may be "self-cleansing."

5. Eytelwein deduced the formula

$$V = \cdot 9091 \sqrt{2\,Hr.}$$

Interpret it, and state the principles upon which it is based.

6. What laws govern the proper course of sewers? And what bearing has this question upon the position and number of man-holes, lamp-holes and ventilators?

7. Point out the difference between a system of drainage "to street," and "to back"; and discuss the propriety of adopting the one or the other.

8. Enter fully into the question of the proper sectional form of a sewer.

9. Under what circumstances would you employ stoneware-pipes, bricks, or concrete in the construction of sewers?

10. How would you determine the necessary thickness of the brickwork of a sewer?

11. In what manner should the timber be distributed in shoring (*a*) trenches in very unstable ground, and (*b*) tunnels in good soil.

12. What considerations would guide you in dealing with the question (*a*) of junctions, (*b*) of flushing appliances, and (*c*) of ventilation?

NOTE.—Answers should be concise and, as far as possible, illustrated by sketches or diagrams.

BAC. APP. SC. EXAMINATION.

(ENGINEERING COURSE.)

GENERAL PAPER.

MONDAY, APRIL 19TH:—MORNING, 9 TO 12.

Examiner, ... G. F. ARMSTRONG, M.A., C.E.

1. How, with the aid of a "plumb-bob," can a meridian be approximately determined by observing the positions of the Pole-Star and ϵ Ursæ Majoris? and would the result so obtained be sufficiently accurate for ordinary surveying purposes?

2. If a frame be acted upon by any system of external forces, and if the frame be conceived to be completely divided into two parts by an ideal surface, show that the stresses along the bars that are intersected by that surface, balance the external forces that act on each of the two parts of the frame.

3. Describe the process of setting out the *levels* of a tunnel.

4. What steps would you take to prevent "slips" in the sides of cuttings?

5. Give an example of each of the three methods usually employed in setting out circular curves; and explain what is meant by a *three-degree curve*.

6. What is the object of "coning" the tires of engine wheels? and to what objections is the practice open?

7. What is the best method of sinking a stone-lined shaft?

8. How may the proper length of a "curve of adjustment" be determined?

9. Describe the commoner forms of the moveable canal-bridge.

10. Suppose the two endmost cross-sections of an embankment known; show how, by assuming another section, the depth of which is a mean between those of the ends, and the sidelong slope of the ground in its neighborhood a harmonic mean between those at the same places, the solid contents may be found.

11. What are the principles upon which the skew-arch is constructed?

12. How would you calculate the breadth of a slope when the natural ground has a given uniform sidelong inclination?

NOTE.—Answers should be concise and, as far as possible, illustrated by sketches or diagrams.

BAC. APP. SC. EXAMINATION.

(ENGINEERING COURSE.)

DRAWING.

MONDAY, APRIL 19TH :—AFTERNOON, 2 TO 5.

Examiner, ... G. F. ARMSTRONG, M.A., C.E.

1. Draw the curve of a semi-elliptical arch. Span 16 feet, and height 4 feet.

2. Show, in isometrical perspective, two arches (as in 1) of a bridge. Width of roadway 12 ft.: parapets 3 ft. high and 18 in. thick; and the bridge is 12 ft. high to the springing. Other details at discretion.

3. Draw orthographically an octagonal prism, 2 ft. side and 8 ft. high, when its long axis is at 30° to both planes of projection.

4. Two prisms (as in 3) are joined together at their long faces, and stand upright on a horizontal plane. Draw a perspective view of this object on a picture plane that is 2 ft. from the nearest prism, and 3 ft. from the observer's eye. Height of eye $4\frac{1}{2}$ ft., and position 2 ft. on the left of the nearest edge of the prism.

Scales, { (1) and (2) ..... $\frac{1}{2}$ in. = 1 ft.
{ (3) and (4) ..... $\frac{3}{8}$ in. = 1 ft.

NOTE.—Lines of construction should be dotted. Neatness and accuracy are essential.

BAC. APP. SC. EXAMINATION.

(ENGINEERING COURSE.)

DESIGNING AND ESTIMATES.

THURSDAY, APRIL 22ND :—9 A.M. TO 5 P.M.

Examiner,.....G. F. ARMSTRONG, M.A., C.E.

Prepare a design and estimate for one of the following structures :—

1. A timber Queen-post Roof, for a span of 50 ft.

2. A double-barrelled 6 ft. Culvert in stone or brick.

3. A wrought iron Latice-girder Bridge with Abutments, for a double line of rails. Span 100 ft.

——

NOTE.—The general design need not be a finished drawing; but the details—which should be such as would be required in the actual construction of the work—must be carefully prepared.

Bac. App. Sc. EXAMINATION.

(MINING COURSE.)

MINING AND ORE-DRESSING.

Thursday, April 15th :—Morning, 9 to 12.

Examiner,.....B. J. Harrington, B.A., Ph.D.

1. By what considerations should a miner be guided in selecting a position for a shaft, and in determining whether it should be vertical or inclined?

2. Describe the sinking and lining of a shaft through thick deposits of surface sand.

3. What forms of tram-rails are usually employed in mines, and to what gauge should they be laid?

4. Explain the construction and use of the water-trompe.

5. What advantages are derived from the splitting of air currents?

6. Describe the Cornish pumping engine and the Cornish boiler.

7. Explain the construction of one of Darlington's water-pressure engines.

8. How is the working load for iron, steel, and hempen ropes calculated?

9. Explain the following terms :—Whipsey-derry, set-off, collar-launder, skip, sump, and goaf.

10. A stamp has a weight of 600 pounds and a fall of 9 inches; if $w' =$ 7 foot-pounds, what will the area of the shoe-face be?

11. Explain the construction of Blake's rock-breaker.

12. What is a round buddle, and how is it used?

Note.—The answers should be illustrated by sketches.

BAC. APP. SC. EXAMINATION.

(MINING COURSE.)

METALLURGY.

THURSDAY, APRIL 15TH:—AFTERNOON, 2 TO 5.

Examiner, ... B. J. HARRINGTON, B.A., PH.D.

1. Describe the production of steel by the cementation process.

2 Explain the construction and use of the Catalan forge.

3. What are the conditions determining the production of white iron in the blast furnace?

4. What foreign matters are liable to occur in commercial copper, and how is the metal affected by them?

5. Describe the manufacture of tin-plate.

6. In what way may *hard lead* be softened?

7. What is the best method of extracting silver from argentiferous copper matts? Give the details of the process.

8. How is antimony regulus produced from the sulphide?

9. What are the properties of the metals bismuth and aluminium?

10. How should the ores exhibited be smelted? What is the source of the metallurgical products?

BAC. APP. SC. EXAMINATION.

(MINING COURSE.)

MINERAL SURVEYING AND DRAWING.

MONDAY, APRIL 19TH:—AFTERNOON, 2 TO 5.

Examiners, ... { G. F. ARMSTRONG, M.A., C.E.
B. J. HARRINGTON, B.A., Ph.D.

1. What are the objects aimed at in making a *complete* and *accurate* survey of a mine?

2. Put in isometrical perspective, a cottage from which the roof has been removed, consisting of one room, of which the external dimensions are, length 15ft., height 10ft. 6in., and breadth 12ft. In one of the longer sides are two windows with semicircular heads, each 5ft. 6in. high to the springing of the arch, 3ft. 6in. wide, and 2ft. 6in. from the ground. In one of the shorter sides is a doorway 3ft. wide, and 6ft. 6in. high, reached by two steps each 3ft. long, 1ft. wide, and 6in. high. The walls are 1 ft. thick. Scale 4ft. = 1in.

3. Compare the respective merits of the Dial and the Theodolite, as underground surveying instruments.

4. In how many ways can the underground be connected with the surface survey?

5. Exhibit a form of note-book suitable for underground work.

6. Illustrate, by means of an isometrical view on a scale of $\frac{1}{10}$ in. to a foot, the "Post and Stall" method of working a coal mine.

FACULTY OF LAW.

FIRST YEAR.

COMMERCIAL LAW.

Examiner,.....PROFESSOR WURTELE, Q.C., B.C.L.

OBLIGATIONS.

1. What are the essentials of an obligation?

2. What persons are incapable of contracting?

3. Explain the difference between the incapacity of married women and that of minors?

4. What is fraud, and when is it a cause of nullity?

5. From what contracts is a minor who has attained the age of discernment not relievable?

6. What is the effect of a contract for the purchase of a thing which is indeterminate?

7. What obligation rests upon him who unduly receives anything; and explain the difference in his liability when he was in good faith and when he was in bad faith?

8. To what does a breach of obligation render the debtor liable; and in such case what are the rights of the creditor?

9. To what damages is a debtor liable; and what is the effect of a certain sum being stipulated for damages in a contract?

10. What is a term; and when does a debtor lose its benefit?

FIRST YEAR.

CIVIL PROCEDURE.

Examiner,.....PROFESSOR DOUTRE, D.C.L.

1. Quand la profession d'avocat a-t-elle été introduite en Canada?

2. Comment les parties comparaissaient-elles devant les tribunaux sous la domination française?

3. Quand les notaires ont-il commencé à pratiquer leur profession dans cette Colonie?

4. Quels étaient les divers tribunaux en existence sous la domination 5rançaise tant au Civil qu'au Criminel ?

5. La haute, moyenne et basse justices ont-elles été administrées séparément par les seigneurs sous la domination française, et indiquez en quoi leurs attributions consistaient ?

6. Indiquez depuis quant et comment la profession d'avocat s'est constituée en corporation ?

7. La profession d'avocat a-t-elle des règles particulières pour ce qui se rapporte à ses devoirs, si oui, indiquez-en les sujets principaux ?

8. Veuillez indiquer par leurs noms seulement les divers tribunaux en existence sous le Code de Procédure ?

9. Quelles sont les attributions d'un Commissaire de la Cour Supérieure et comment le nommez-vous ?

10. Devant quel tribunal assignez-vous un défendeur ?

FIRST YEAR.

CIVIL LAW.

Examiner.....PROFESSOR RAINVILLE.

1. Qui est sujet britannique ?

2. Quels sont les effets de la mort civile ?

3. Que doit contenir l'acte de célébration de mariage ?

4. Où est le domicile du mineur ? Où est celui de la femme mariée ?

5. Quelles personnes peuvent demander l'envoi en possession provisoire des biens d'un absent ? Quant et devant quel tribunal ?

6. Le conjoint de l'absent peut-il se remarier s'il s'est écoulé cent ans depuis la naissance de ce dernier ?

7. Dans quels cas la femme mariée peut-elle agir sans l'assistance ou l'autorisation de son mari.

8. Quelles sont les causes qui donnent droit à la séparation de corps ?

FIRST YEAR.

LEGAL HISTORY.

Examiner.....MR. LAREAU.

1. A quelle année date l'introduction du droit français, ou de la Coutume de Paris, dans le Canada.

2. Quelles sont les sources principales du droit canadien.

3. Qu'entendez-vous par édit, déclaration et ordonnance des rois de France.

4. Nommez les grandes ordonnances qui ont été publiées au XIVe siècle, avec la date respective de leur publication.

5. Quel est l'objet de l'ordonnance de 1667, et à quelle date se rapporte son enrégistrement au Conseil Supérieur de Québec.

6. Veuillez décrire les principaux rouages du système judiciaire sous la domination française.

7. A quelle année remonte l'acte de Québec, et énumérez les principales dispositions de cette loi et celles de l'acte constitutionnel de 1791.

8. Enumérez les principales questions qui ont été débattues dans l'ancien Parlement de Québec (1791-1840), et dans le Parlement-Uni (1840--1867).

9. Quels sont les principaux changements constitutionnels ou formes de gouvernement qui se sont succédés depuis l'établissement de la colonie jusqu'à 1759.

10. Enumérez les différentes formes de gouvernement qui se sont succédées depuis 1859 jusqu'à 1867.

11. Dites ce que vous connaissez de *l'Extrait des Messieurs*.

12. Comment s'établit le chiffre de la représentation en vertu de l'acte constitutionnel de 1867, et comment s'opère la réduction et l'augmentation de la députation dans chaque province de la Puissance du Canada.

FIRST YEAR.

ROMAN LAW.

Examiner.....C. A. GEOFFRION, B.C.L.

1. Nommez les principaux jurisconsultes Romains avant Justinien, ainsi que quelques-uns de leurs ouvrages qui nous sont parvenus.

2. Donnez en peu de mots l'historique du *Corpus juris Civilis* ainsi que ses principales divisions.

3. Expliquez la différence entre *plebiscitum*, *senatus-consultum*, et *lex*.

4. Définissez le droit naturel, le droit des gens et le droit civil, tels qu'expliqués dans les Institutes.

5. Que faut-il entendre par personne ; tous les hommes sont-ils des personnes ?

6. Quelles sont les personnes qui dépendent d'elles-mêmes ou d'autrui ; *sui vel alieni juris?*

7. Pouvait-on contracter mariage de différentes manières à Rome ; définissez chacune de ces manières et leurs effets civils ?

8. Que faut-il entendre par adoption et adrogation ; quelle était la différence entre ces deux modes d'acquérir la puissance paternelle ?

9. Qu'étaient les *agnati* et les *cognati?*

10. Combien y avait-il d'espèces de tutelles à Rome ; expliquez la nature chacune en peu de mots ?

SECOND YEAR.

ROMAN LAW.

Examiner,.....C. A. Geoffrion, B. C. L.

1. Qu'entendez-vous par choses communes, publiques, qui n'appartiennent à personne (*res nullius*) ?

2. Citez quelques modes d'acquérir par accession.

3. De combien d'attributs se compose le droit de propriété ; peuvent-ils exister séparément en faveur de différentes personnes ?

4. Qu'est-ce que les servitudes ; en combien de classes se divisent-elles ?

5. Quelle différence établissez-vous entre le droit d'usage et l'usufruit ?

6. Définissez les choses *mancipi* et *nec mancipi* ; à quelles de ces choses s'appliquaient l'usucapion et la prescription ?

7. Expliquez les formalités essentielles au testament tripartite ?

8. Qu'était-ce que la *querela inofficiosi testamenti* et quand avait-elle lieu ?

9. Que faut-il entendre par faction active et faction passive de testament?

SECOND YEAR.

CONSTITUTIONAL LAW AND HISTORY.

Examiner,.....Mr. Archibald.

1. Is allegiance due to the person or to the office of the Sovereign, and give reasons and authorities for your opinion ?

2. Can a British subject abandon his status as such ? If so : how ? State the changes in the law, in this respect, since the Code.

3. Give an outline of the form of government among the early Saxons, and of the functions and powers of the Wittanageunt.

4. Give a descriptive statement of responsible government, pointing out the principal points of difference between it and prerogative government ?

5. About what date was the necessity of unanimity in the Cabinet recognized, and point out some of the results to which this principle leads?

6. What is the earliest trace of popular election of representatives to serve in Parliament, and when did such election become a fixed principle of the Constitution?

7. What is the measure of responsibility, if any exist, of one cabinet minister for the acts of another: 1, under prerogative government; 2, under responsible government?

8. What are the principal prerogatives of the Sovereign under our form of government?

9. What is the relation of our Federal and Local Parliaments to each other with regard to legislation?

10. Are our Courts of Justice bound by every Act not repealed or disallowed which may be passed either by the Local or Dominion Parliaments? and point out distinctions if any exist.

11. Give a short resumé of the procedure in Parliament upon a contested Private Bill.

SECOND AND THIRD YEARS.

COMMERCIAL LAW.

Examiner, ...PROFESSOR WURTELE, Q.C., B.C.L.

MERCHANT SHIPPING.

1. Give the principal Statutes regulating this subject?

2. How is a British ship divided, and how can it be owned?

3. How is a British ship registered?

4. What are the privileges of a British ship?

5. What is the liability of owners, and what statutory limitation exists in their favor

6. In cases of collision, by whom and how is the loss borne?

7. When can the master bind the owner; when does he incur personal liability; and when can he sell the cargo and even the ship?

8. What is a charter party?

9. What right and privilege has the master when the freight is not paid?

10. To what does a consignee subject himself towards the master when he receives goods conveyed?

SECOND AND THIRD YEARS.

INTERNATIONAL LAW AND INSURANCE.

Examiner.....PROFESSOR KERR.

1. What is general average? What is the difference between general and particular average?

2. When does a general average contributien arise? Who are the parties liable therefor?

3. What is jettison? To what rights does jettison give rise?

4. In life insurance what species of interest, if any, is required to exist in favor of the insured?

5. Can a creditor insure the life of his debtor? if so; state under what circumstances, and in the event of payment by the debtor of the debt in question, does the insurance remain valid?

6. What is the difference between a warranty and a representation in insurance policies?

7. Where there are three different policies of Marine insurance in existence on the same object the first of which fully covers the value of the article insured, what becomes of the other two policies, are they liable to contribute or not?

8. What is abandonment? How is it effected? What effect does it produce?

9. In a policy of fire insurance, can the insured generally declare merely that he is interested in the object insured, or must he specify his interest?

10. Does the value for which the goods are insured under a policy of fire insurance prove conclusively that value, if nay, state what should be done by the insured under the circumstances?

11. What is the difference between bottomry and respondentia?

12. What is the main condition upon which bottomry bonds are entitled to payment in preference to other securities, held by other creditors? If there be three bottomry bonds validly granted on the same vessel which of the three is entitled to payment in the first instance?

SECOND AND THIRD YEARS.

CIVIL PROCEDURE.

Examiner.....PROFESSOR DOUTRE.

1. Veuillez indiquer la juridiction des tribunaux en existence dans la Province de Québec ?

2. Quels sont les jours ou vous pouvez ou vous ne pouvez pas procéder devant les tribunaux ou plutôt qu'entendez-vous par jours fériés et jours non fériés ?

3. Qu'est-ce que procéder *in formâ pauperis ?*

4. Indiquez les règles du Code de Procédure relativement à ce qui est requis pour assigner le ou les défendeurs, quant à la signification du Bref ?

5. Qu'est-ce que l'élection de domicile relativement à la partie assignée et au procureur ?

6. Combien d'exceptions préliminaires, et en quoi consistent-elles ?

7. Combien de faux, et indiquez la procédure dans chacun ?

8, Combien y a-t-il de modes d'Enquête ?

9. Dans quel cas le procès par jury a-t-il lieu ?

SECOND AND THIRD YEARS.

CIVIL LAW.

Examiner.....MR. LAREAU.

1. Dans quel ordre s'établissent les privilèges sur les biens meubles et sur les biens immeubles.

2. Quelles sont les exceptions que le tiers-détenteur peut opposer à celui qui poursuit hypothécairement ; donnez la définition de ces dernières exceptions.

3. Qu'est-ce que l'hypothèque, en combien d'espèces se divise-t-elle, et donnez la définition de chacune d'elle.

4. Quels sont les principaux effets de l'action hypothécaire.

5. Comment s'éteignent les privilèges et hypothèques.

6. Qu'est-ce que la prescription et qu'entendez-vous par prescription acquisitoire et prescription libératoire.

7. Comment se règle la prescription en fait d'immeubles et en matière de biens meubles.

8. Qu'est-ce que la possession et dans quelle condition peut-elle servir de bâse à la prescription.

9. Quelles sont les causes légales qui empêchent la prescription.

10. Qu'entendez-vous par interversion de titre, et dans quels cas cette interversion peut-elle créée une possession utile à la prescription.

11. Quelles sont les choses imprescriptibles de leur nature.

12. Quelles sont les causes qui interrompent ou suspendent la prescription.

THIRD YEAR.

ROMAN LAW.

Examiner.....C. A. Geoffrion, B.C.L.

1. Expliquez l'ordre et le système des successions légitimes à Rome ; le mode de compter les dégrés de parenté, et dites si ce mode diffère de celui consacré par notre Code Civil.

2. En combien de classes étaient divisées les personnes; à qui donnait-on un tuteur ou un curateur et quelle était la durée de la tutelle ou de la curatelle ?

3. Quelle était l'étendue de la puissance paternelle, par qui et sur qui s'exerçait-elle et comment était-elle dissoute ?

4. Le droit de propriété s'exerçait-il toujours de la même manière à Rome ; y avait-il des choses qui étaient susceptibles d'un domaine particulier et quelle était la manière d'acquérir et d'aliéner ces dernières?

5. En combien d'époques différentes l'histoire du Droit Romain peut-elle se diviser; donnez les principales sources du droit à chacune de ces époques?

THIRD YEAR.

CIVIL LAW.

Examiner.....Professor Rainville.

1. Quand commence la communauté de biens entre époux ?

2. Les meubles tombent-ils dans la communauté ?

Quid, d'une créance alternative ?

3. Quand le remploi, est-il parfait à l'égard de la femme ?

4. Contre qui et contre quels biens les créanciers de la femme, antérieurs au mariage, ont-ils recours ?

5. Quels sont les obligations de la femme séparée de biens quant aux charges du mariage ?

6. Quels sont les droits de la femme qui renonce à la communauté ?

7. Quelle est la différence entre la séparation de biens et l'exclusion de communauté?

8. La femme peut-elle s'obliger pour son mari? quels sont ses droits si elle exécute son obligation, v. g. si elle paye?

THIRD YEAR.

CRIMINAL LAW.

Examiner,.....MR. ARCHIBALD.

1. Define a crime. In what respect does it differ from a private wrong?

2. Classify crimes, and give a description of each class.

3. Give a minute definition of the term *malice* as used in criminal law.

4. Give a statement of the law in cases where an act in itself criminal is committed by a person labouring under some defect of will, pointing out the different classes of such cases.

5. What degree of insanity will exempt from criminal responsibility? and lay down a rule to govern such cases.

6. What is an accessory before the fact? What is an accessory after the fact?

7. Are there any crimes in the commission of which there can be no accessories? and if so, state your reasons.

8. Point out the distinction between murder and manslaughter.

On a trial for murder, what pleas may be urged to reduce the crime to manslaughter?

9. What are the principal special pleas by which an indictment may be met, and under what circumstances may each be pleaded?

10. What is a challenge to the array, and for what causes may it be sustained?

11. How many peremptory challenges are allowed to the Crown and the prisoner, respectively, in a trial for murder? How many in a trial for obtaining goods under false pretences?

12. What is understood by the right of the Crown to order jurors to stand aside? Has the private prosecutor this right in all cases? If not, mention any exceptions that may occur to you.

13. What are the duties of a justice of the peace in relation to indictable offences?

14. Are there any crimes for which bail cannot be accepted? State the different methods of obtaining bail in different cases.

15. What is the duty of a grand jury with reference to a bill of indictment?

---

* The first 10 questions for the ordinary examination, the whole paper for the medal.

EXAMINATION FOR THE ELIZABETH TORRANCE GOLD MEDAL.

COMMERCIAL LAW.

Examiner,.....PROFESSOR WURTELE, Q.C., B.C.L.

1. When must a divisible obligation be performed as if it were indivisible?

2. How are partners liable towards third persons?

3. What are the principal privileges and disabilities of corporations?

4. What are the rights of the holder of a cheque, and to what does want of diligence expose him?

5. How can a mortgage be given upon a ship, and what are the rights of the mortgagee?

6. What is a Bill of Lading, and what is the effect of its transfer by endorsement and delivery?

FACULTY OF MEDICINE.

M.D., C.M., PRIMARY EXAMINATION.

ELEMENTARY BOTANY.

SATURDAY, DECEMBER 12TH :—MORNING 9 TO 12.

Examiner,.....J. W. DAWSON, LL.D., F.R.S.

1. Describe an ordinary parenchymatous cell and the mode of thickening of the cell-wall.

2. Mention the substances found in the cell-sap of plants—(1) in solution, (2) in the solid state ; and state which are most important to the plant, and why ?

3. Name the kinds of vascular tissue, and describe one of them.

4. Explain the division of plants into Cormophytes and Thallophytes ; Phænogams and Cryptogams.

5. Explain the structure and functions of the Leaf.

6. Describe the Exogenous stem, and state how it differs from the Endogenous and Acrogenous.

7. Explain Phyllotaxis, and state its principal kinds.

8. Explain the sources of the food of plants, with special reference to their organic part.

9. State the more important relations of the plant to the soil, with reference to inorganic matters.

10. Explain any two of the following terms :—(a) Parasite, (b) Osmose, (c) Stolon, (d) Liber, (e) Phyllodia.

BOTANY.

SATURDAY, MARCH 6TH :—MORNING, 9 TO 1.

Examiner,..... J. W. DAWSON, LL.D., F.R.S., &c.

1. What are Cellular Structures as distinguished from Vascular? Give examples.

2. Describe Prosenchymatous Tissue, with examples, and state its mode of formation.

3. Describe the structures in the blade of the leaf.

4. Explain the relations of Carbonic Acid and Ammonia to the nutrition of the plant.

5. Describe Root-fibrils, and state the distinction between a Root and a Rhizoma.

6. Describe the parts of the Pistil, including the ovules, and state the mode of their fertilisation.

7. Describe the reproductive organs of Ferns, in comparison with those of Mosses.

8. Explain the terms Gamopetalous, Epigynous, Syngenesious, and the modifications of parts by which these arrangements are produced.

9. What are the histological characters and mode of production of Cotton, Vegetable Ivory and "Sulphur Rain."

10. Explain the Natural System in Botany, and state the gradation of groups, with examples.

11. State the distinction between Monocotyledonous and Dicotyledonous Embryos, and between Albuminous and Exalbuminous Seeds.

12. State the distinction between Angiosperms and Gymnosperms.

13. Describe the Structures indicated by the terms, Raceme, Umbel, Pappus, Achene.

14. State the characters of any Canadian Exogenous order, with examples.

15. State what you know of the specimens exhibited.

MATERIA MEDICA

SATURDAY, MARCH 20TH:—10 TO 11½ A.M.

Examiner, ... PROFESSOR WM. WRIGHT, M.D., L.R.C.S.E.

1. Give some general observations on the class of Expectorant Medicines, and the doses of the preparations in which they are usually prescribed.

2. What is the mode of making Nitre,—what are its actions and uses?

3. What remedy is got from the Exogonium Purga? Give a short account of its varieties and constituents.

4. Distinguish between Calomel and Calamine, between Castoreum and Castor Oil; between Copper and Copperas; Berberine and Bebeerine.

5. How do the chief ingredients in Cinchona differ as to their character and actions?

6. What are the effects of poisonous doses of Belladonna on special portions of the nervous system? And state the kinds of pains, spasms, inflammations, and fevers to which it is best adapted.

CHEMISTRY.

SATURDAY, MARCH 20TH:—MORNING, 11½ A.M. TO 1 P.M.

Examiner,.....PROFESSOR R. CRAIK, M.D.

1. Give an outline of the old and new theories concerning the nature of heat and light.

2. Explain the action of heat in converting a solid into a liquid and a liquid into a vapour; and also the effect of the reverse processes of converting a vapour into a liquid and a liquid into a solid.

3. Explain the meanings of the terms *allotropism*, *isomorphism*, *dimorphism*, *isomerism and polymerism*.

4. What elements belong to the Halogen group? In what condition are they generally met with in nature; and what are the properties, uses and mode of preparation of Chlorine?

5. What are the chemical changes which occur during the roasting of metallic ores containing sulphur, and during the reducing of oxidized ores with charcoal?

6. What are the principal differences between an organized substance and an organic compound, and between organic and inorganic compounds?

INSTITUTES OF MEDICINE.

SATURDAY, MARCH 20TH:—AFTERNOON, 3 TO 4½.

Examiner.....WM. OSLER, M.D.

1. Describe the minute anatomy of bone.

2. Describe the coagulation of blood; mention conditions affecting it. What is the probable explanation of the process?

3. State the condition of the chambers and valves of the heart during the sounds and pause.

4. How is absorption effected in the alimentary canal? Where do the chief constituents of the food enter the circulation?

5. Give the minute anatomy of the Pancreas. What are the uses of its secretion?

6. Explain the conditions known as Presbyopia, Myopia, Hypermetropia and Astigmatism.

ANATOMY.

SATURDAY, MARCH 20TH :—AFTERNOON, 4½ TO 6.

Examiner.....PROF. W. E. SCOTT, M.D.

1. Describe the knee joint, give the ligaments and their divisions, and the muscles in relation to it.

2. Give the muscles attached to the Os Innominatum.

3. Name the branches of the Internal Carotid and Opthalmic Arteries.

4. Give the formation, branches and relations of the Portal Vein, the fissures and lobes of the liver it enters, and terminations within that organ.

5. Describe the base of the Brain, and name the arteries forming the circle of Willis.

6. Describe the cervical ganglia of the the Sympathetic, the branches of communication and distribution.

M.D., C.M., FINAL EXAMINATION.

SURGERY.

TUESDAY, MARCH 23RD :—AFTERNOON, 3 TO 4½.

Examiner.....PROFESSOR GEORGE W. CAMPBELL, A.M., M.D., L.R.C.S., EDINBURGH, DEAN OF MEDICAL FACULTY.

1. State the symptoms, causes, diagnosis, prognosis and treatment of Traumatic Tetanus.

2. Give the divisions and general smptoms of Fractures, what are the principal difficulties met with in their treatment, and how do you overcome them ?

3. Give the different forms of Gangrene and their treatment.

4. Give the symptoms and treatment of Morbus Coxarius, under what circumstances is resection advisable, and how is the operation performed ?

5. Give the symptoms, diagnosis, and different methods of treatment of Popliteal Aneurism ; if ligature becomes necessary, where is it applied, and how is the operation performed ?

6. Under what circumstances is Colotomy advisable, what portion of the intestine should be opened, what is your guide to find it, and how is injury of the Peritoneum avoided ?

MEDICAL JURISPRUDENCE.

TUESDAY, MARCH 23RD :—AFTERNOON, 4.30 to 6.

Examiner.....PROFESSOR GEORGE E. FENWICK, M.D.

1. Describe the difference in character and appearance of wounds inflicted during life, from those produced after death?

2. What evidence would lead to the belief that a wound had been inflicted with a weapon, and to determine whether the wound was accidental, suicidal, or homicidal?

3. What tests, other than chemical, may be employed in cases of suspected poisoning? In what class of poisons are they applicable, and what value would be attached to the results?

4. What part of the lungs of a new born infant would give evidence of respiration or inflation? How would you determine which of these two conditions existed?

5. Mention what occasions death from natural causes in new born infants. How would you decide between this and death from intentional violence or neglect?

6. Mention the physical characters of Idiocy and Cretinism. How would you distinguish between these conditions and imbecility?

OBSTETRICS.

WEDNESDAY, MARCH 24TH.

Examiner.....PROFESSOR D. C. MACCALLUM, M.D., M.R.C.S.L.

1. Give the symptoms, diagnosis and treatment of inversion of the uterus.

2. Suppose the conjugate diameter of the brim of the pelvis to measure less than three inches, what means must be had recourse to in order to accomplish the delivery of the patient?

3. Mention the circumstances to which your attention should be directed in the treatment of a patient during the first week after labour, and state particularly what you would consider to be indications of unfavorable import.

4 Give the points of diagnosis between a face and a breech presentation —between a shoulder and a breech and between a foot and a hand.

5. What disorders of the digestive system frequently accompany the pregnant state, and how would you treat the several conditions?

6. Describe the different varieties of extra-uterine pregnancy — their symptoms, progress and treatment.

THEORY AND PRACTICE OF MEDICINE.

WEDNESDAY, MARCH 24TH:—11½ A.M. TO 1 P.M.

Examiner.....PROF. R. P. HOWARD, M.D, L.R.C.S.E.

1. State the characters of the Zymotic diseases, and the conditions of the body which favour their operation; and enumerate the causes of the continued, periodical and eruptive fevers.

2. Describe the morbid anatomy of Rickets, and its most important symptoms.

3. Give the diagnosis between Acute Peritonitis and the diseases which may be mistaken for it, and sketch its treatment.

4. Describe the treatment of Scarlatina, Membranous Croup and Dysentery.

5. Enumerate the causes of Endocarditis; give the characters of pericardial murmurs, and explain how old endocardial murmurs may be known from recent ones.

6. Mention the conditions which produce Ascites, distinguishing the common from uncommon, and give the diagnosis between Cirrhosis and Cancer of the Liver.

EXAMINATION FOR SCHOOL CERTIFICATE AND ASSOCIATE IN ARTS.

PRELIMINARY SUBJECTS.

ENGLISH GRAMMAR.

TUESDAY, MAY 25TH:—MORNING, 9½ TO 12.

Examiners,..... { VEN. ARCHDEACON LEACH, D.C.L.
REV. PROF. MURRAY, LL.D.
F. W. KELLEY, M.A., Ph.D.

1. Classify the consonants according to the organs of speech by which they are pronounced.

2. Write down a sentence which contains all the parts of speech, and draw a line under each indeclinable word in it.

3. Give the plurals of the following words:—self, sheaf, gulf, woman, spoonful, father-in-law, no, deer, Mr., Madam, focus, vortex, larva, genus, genius, crisis, cherub, virtuoso, beau, dilettante.

4. Write the principal parts of the following verbs:—bid, set, sit, lie, lay, sing, flee, fly, see, swell.

5. When is *shall* used as an auxiliary and when *will?*

6. Parse "That is the very book that I lost."

7. Give an example of a simple, complex, and a compound sentence respectively.

8. Give four methods of enlarging the subject of a sentence, with examples.

9. Analyse the following sentence:—

"Sunshine of Saint Eulalie" was she called; for that was the sunshine
Which, as the farmers believed, would load their orchards with apples.

10. Correct the following sentences if they need correction:—

Suppose you and me go. He gave them to you and I. If I were him, I would go abroad. They that honor me, I will honor. The "Pleasures of Hope" was written by Campbell. I got it at Dawson's, the bookseller. I done my sum first. Has either of your three friends arrived? Neither the captain nor the mate were saved. Give me them books.

ENGLISH AND CANADIAN HISTORY.

TUESDAY, MAY 25TH:—AFTERNOON, 2 TO 5.

Examiners,..... { VEN. ARCHDEACON LEACH, D.C.L.
REV. PROF. MURRAY, LL.D.
F. W. KELLEY, M.A., Ph.D.

1. Of what races is the British nation composed? In what parts of the country does each race prevail?

2. Who were the Normans? What were the results of the battle of Hastings?

3. Give the leading events in the reign of Edward III, or George III.

4. Name the Sovereigns of the Tudor line, and the leading features of the Tudor Period.

5. Tell what you know of two of the following persons:—Alfred the Great, Cardinal Wolsey, Sir Walter Raleigh, Archbishop Laud, Oliver Cromwell, William Pitt.

6. Where are Crecy, Bannockburn, the Boyne, Culloden, Marston Moor, Plassy, Saratoga, Waterloo, Sebastopol? Mention some historical event in connection with each.

7. Name the discoverers of America and the date of their discoveries.

8. Give a brief account of Jacques Cartier's visit to Hochelaga.

9. Give a summary of the campaigns of 1758-59.

10. What were the causes of the Canadian Rebellion of 1837? Who were the Leaders in it?

ARITHMETIC.

WEDNESDAY, MAY 26TH:—MORNING, 9 TO 12.

Examiners,..... { REV. J. A. LOBLEY, M.A.
REV. A. N. MCQUARRIE, M.A.

1. Divide twenty-seven millions four thousand and nine by four thousand and seventeen.

2. Give a rule for reducing old Canadian currency (pounds, shillings and pence) to dollars and cents. How many dollars and cents are there in £704.19.11¾? Give a reason for the process.

3. Give the rule for finding the greatest common measure of two numbers. Find the G. C. M. of 8393 and 4609.

4. State and illustrate by an example how a vulgar fraction is expressed. Name its parts, and point out their uses respectively.

5. How many kinds of vulgar fractions are there? Name and describe them, giving examples in each case.

6. Find the value of $\frac{2}{7}$ of $\frac{3}{11}$ of $\frac{8\frac{1}{2}}{17}$ of an acre at $38.50 per acre.

7. What are decimal fractions, and how are they written down? Find the value to three places of decimals of 91·671 ÷ ·000916.

8. Find the interest of $800 for 6 years 5 months and 18 days at 8 per cent.

9. Give a rule for the extraction of the square root. Extract the square root of 60·481729.

10. A, B and C run a race of a quarter of a mile, A having 3 yards start. B gains 2 feet on A in every 25 yards for the first 250 yards; after that he loses 1 foot in every 19 yards. C gains 1 foot on A in every 40 yards throughout. What is the result of the race?

GEOGRAPHY.

Wednesday, May 26th:—Afternoon, 2 to 3½.

Examiners,..... { Ven. Archdeacon Leach, D.C.L.
Prof. Murray, LL.D.
F. W. Kelley, M.A., Ph.D.

1. What provinces compose the Dominion of Canada? Name the capital and chief commercial products of each.

2. How could one go by water from Thunder Bay, Lake Superior, to Halifax, N.S?

3. Where are the Bay of Fundy, Georgian Bay, Lake Winnipeg; the Mackenzie, Miramichi and Annapolis rivers; the islands of Cape Breton, Jamaica, Vancouver and the Bermuda Islands; Chambly, Queenston, Louisburg, and the Plains of Abraham?

4. Bound the United States of America; and name those States and Territories which border on Canada.

5. Give the principal rivers, mountain ranges, and mineral productions of South America.

6. Over what waters would a vessel pass in going from St. Petersburg to Constantinople?

7. Name five of the largest rivers of Asia. State in what direction they flow, and where they empty.

8. Draw an outline map of Africa, and mark upon it in their proper places the principal mountains, lakes, and cities.

9. What are the productions of Australasia which form articles of commerce?

10. On what rivers are the following towns:—Fort Garry, Cairo, St. John, N.B., London, Washington, Paris, New Orleans, Hamburg, Calcutta, Glasgow, Philadelphia?

SCRIPTURE HISTORY.

WEDNESDAY, MAY 26TH:—AFTERNOON, 3½ TO 5.

Examiners, ... { VEN. ARCHDEACON LEACH, D.C.L. / REV. PROF. MURRAY, LL D. / F. W. KELLEY, M.A., Ph.D.

1. Draw an outline map of Palestine, and mark on it the position of Judea, Samaria, Sea of Galilee, Mount Carmel, Mount of Olives, Cana, Bethlehem, Nazareth, Bethany and Jerusalem.

2. Write down the names of the twelve original Apostles, and state what you know of any one of them.

3. Give some account of (1) Joseph of Arimathæa; (2) Herod the King; (3) John the Baptist; (4) Pontius Pilate.

4. On what occasions was a voice heard from heaven addressed to, or referring to, our Lord?

5. Sketch briefly the circumstances of Christ's burial.

6. What proofs are given of Christ's resurrection?

OPTIONAL SUBJECTS.

LATIN.

THURSDAY, MAY 27TH:—MORNING, 9 TO 12.

Examiners,..... { REV. GEORGE CORNISH, LL.D. / REV. GEORGE WEIR, M.A.

N.B.—Candidates are allowed the option of translating either of the prose extracts and any one of those from the poets; but they must take one extract, and not more, from both divisions.

---

1. Translate (Div. I.):— { Cæsar, De Bell. Gall., I. and II. / Cicero, Pro Lege Manilia.

(A) In castris Helvetiorum tabulae repertae sunt *literis Graecis* confectae, et ad Caesarem relatae, quibus in tabulis nominatim ratio confecta erat, qui numerus domo *exisset* eorum qui arma ferre *possent:* et item separatim pueri, senes, mulieresque. Quarum omnium rerum summa erat, capitum Helve-

tiorum millia CCLXIII, Tulingorum millia XXXVI, Latobrigorum XIV, Rauracorum XXIII, Boiorum XXXII: ex his qui arma ferre possent, ad millia XCII. Summa omnium fuerunt ad mīlia CCCLXVIII. Eorum, qui domum redierunt, *censu habito*, ut Caesar imperaverat, repertus est numerus millium C et X.

Bello Helvetiorum confecto, totius fere Galliae legati, principes civitatum, ad Caesarem *gratulatum* convenerunt: 'Intelligere sese, tametsi pro veteribus *Helvetiorum* injuriis *populi Romani* ab iis poenas bello repetisset tamen eam rem non minus ex usu terrae, Galliae, quam populi Romani accidisse: propterea quod eo consilio, florentissimis rebus, domos suas Helvetii, reliquissent, uti toti Galliae bellum inferrent, *imperio*que potirentur, locumque *domicilio* ex magna copia deligerent, quem ex omni Gallia opportunissimum ac fructuosissimum judicassent, reliquasque civitates stipendiarias haberent.' Petierunt, 'uti sibi concilium totius Galliae in diem certam indicere, idque Caesaris voluntate facere, liceret: sese habere quasdam res, quas ex communi consensu ab eo petere vellent.' Ea re permissa, diem concilio constituerunt, et jurejurando, ne quis enunciaret, nisi quibus communi consilio mandatum esset, inter se sanxerunt.

(B) At enim vir clarissimus, amantissimus *reipublicæ*, *vestris beneficiis amplissimis* affectus, Q. Catulus; itemque summis ornamentis honoris, fortunæ, virtutis, ingenii præditus, Q. Hortensius, ab hac ratione dissentiunt: quorum ego auctoritatem apud vos multis locis plurimum valuisse, et *valere oportere* confiteor; sed in hac causa, tametsi cognoscitis auctoritates contrarias fortissimorum virorum et clarissimorum, tamen, *omissis auctoritatibus* ipsa re et ratione exquirere possumus veritatem: atque hoc facilius, quod ea omnia, quæ adhuc a me dicta sunt, iidem isti vera esse concedunt, et necessarium bellum esse, et magnum, et in uno Cn. Pompeio summa esse omnia. Quid igitur ait Hortensius? "Si *uni* omnia tribuenda sunt, unum dignissimum esse Pompeium: sed ad unum tamen omnia deferri non oportere." Obsolevit jam ista oratio, re multo magis quam verbis refutata. Nam tu idem, Q. Hortensi, multa, pro tua summa copia ac singulari facultate dicendi, et in senatu contra virum fortem A. Gabinium graviter ornateque dixisti, cum is de uno imperatore contra prædones constituendo legum promulgasset: et ex hoc ipso loco permulta item contra legem eam verba fecisti. Quid? tum, per deos immortales! si plus apud populum Romanum auctoritas tua, quam ipsius populi Romani salus et vera causa valuisset, hodie hanc gloriam atque hoc orbis terræ imperium teneremus?

2. Construe carefully the words in Italics in the ext. you have chosen.

3. Translate (Div. II):— { Horace, Odes, I., " " III., Virgil, Aeneid, I.

(C)

Integer vitae scelerisque purus
non eget *Mauris iaculis*, neque arcu,
nec *venenatis* gravida *sagittis*,
Fusce, pharetra;

sive per *Syrtes* iter *aestuosas*,
sive facturus per *inhospitalem*
Caucasum, vel quae loca *fabulosus*
lambit *Hydaspes*.

Nam quae me sylva lupus in Sabina,
dum meam canto Lalagen, et ultra
terminum curis vagor expeditis,
fugit inermem:

quale portentum neque militaris
Daunias latis alit aesculetis,
nec *Iubae tellus* generat, leonum
arida nutrix

Pone me, pigris ubi nulla campis
arbor aestiva recreatur aura,
quod latus mundi nebulae malusque
Iupiter urget;

pone sub curru nimium propinqui
Solis, in terra domibus negata:
dulce ridentem Lalagen amabo,
Dulce loquentem.

(D) O nata mecum *consule Manlio*,
seu tu querelas, sive geris iocos,
seu rixam et insanos amores,
seu facilem, pia testa, somnum,

quocumque lectum nomine *Massicum*
servas, moveri digna bono die,
descende, Corvino iubente,
promere *languidiora* vina.

Non ille, quamquam *Socratieis* madet
sermonibus, te negliget horridus.
Narratur et *prisci Catonis*
saepe mero caluisse virtus.

Tu lene tormentum ingenio admoves
plerumque duro: tu sapientium
curas et arcanum *iocoso*
consilium retegis *Lyaeo*:

tu spem reducis mentibus anxiis
viresque, et *addis cornua* pauperi,
post te neque iratos trementi
regum apices neque militum arma.

Te Liber, et, si laeta aderit, Venus,
segnesque nodum solvere Gratiae,
vivaeque producent lucernae,
dum rediens fugat astra Phoebus.

(E) O dea, si prima repetens ab origine pergam,
Et vacet annalis nostrorum audire laborum,
Ante diem *clauso* componat Vesper *Olympo*.
Sos Troia antiqua, si vestras forte per auris
Troiae nomen iit, diversa per aequora vectos

Torte sua *Libycis* tempestas adpulit *oris*.
Fum pius Aeneas, *raptos* qui ex hoste *Penatis*
Classe veho mecum, fama super aethera notus.
Italiam quaero patriam et genus ab Iove summo.
Bis denis Phrygium conscendi navibus aequor,
Matre dea monstrante viam, data fata secutus;
Vix septem convolsae undis Euroque supersunt.
Ipse ignotus, egens, Libyae deserta peragro,
Europa atque Asia pulsus. Nec plura querentem
Passa Venus medio sic interfata dolore est:

Quisquis es, haud, credo, invisus caelestibus auras
Vitalis carpis, Tyriam qui adveneris urbem.
Perge modo, atque hinc te reginae ad limina perfer.
Namque tibi reduces socios classemque relatam
Nuntio et in tutum versis aquilonibus actam,
Ni frustra augurium vani docuere parentes.
Aspice bis senos laetantis agmine cycnos,
Aetheria quos lapsa plaga *Iovis ales* aperto
Turbabat caelo; nunc terras ordine longo
Aut capere aut captas iam despectare videntur:
Ut reduces illi ludunt stridentibus alis,
Et coetu cinxere polum, cantusque dedere
Haud aliter puppesque tuae pubesque tuorum
Aut portum tenet, aut pleno subit ostia velo.
Perge modo, et, qua te ducit via, dirige gressum.

4. (*a*) Write short explanatory notes on the expressions italicised. (*b*) Name the metre and scan the first stanza, or first four verses.

5. Parse, giving the *Present* Infinitive in the case of verbs, and *Nom. Sing.* and *Plu.* in the case of nouns:—pergam, vectos, aequora, ordine, jubente, mentibus, apices, negliget, facturus, leonum, exisset, omissis.

6. (*a*) How many declensions are there in Latin, and how are they severally characterized and distinguished? (*b*) How many classes of Numerals are there? Write down the first five numerals in all classes.

7. (*a*) State the exact difference in meaning between the pronouns *hic*, *ille*, *iste*, and *is*. (*b*) Give the meanings of *talis*, *tantus*, *tot*, together with their correlatives. (*c*) What is the derivation of *quivis* and *quilibet?*

8. Give the difference in meaning between:—lepōris, lepŏris; lātus; lătus; dūcis, dŭcis; redūces and redŭces; rĕfert, rĕfert; edūcet, edŭcet. (*b*) *cognosco, agnosco*; *sileo, taceo, fugo; fugio*; *quotidies, indies*; *facies, vultus*. (*c*) What cases follow, severally, these words:—*erga, in; careo, consulo*; *utilis, indigens?*

9. (*a*) Decline and give the genders of:—*Bos, domus, facinus, aliquis*. (*b*) Compare:—*Iniquus, gracilis, saepe, breviter*. (*c*) Write down the principal parts (1*st Sing.*) of:—*Promo, tero, parco, posco*.

10. Translate into Latin :—(1) The soldier was struck on the head. (2) The father sent his son to Rome to be educated. (3) The consuls being slain, the three armies obeyed Octavius alone. (4) They sent envoys to the general to sue for peace. (5) He said that he had come for the purpose of seeing the city. (Express the final clause of (4) and (5) in as many ways as you can.)

GREEK.

FRIDAY, MAY 28TH :—MORNING, 9 TO 12.

Examiners ..... { REV. GEORGE CORNISH, LL.D. / REV. GEORGE WEIR, M.A.

1. Translate, Xenophon, Anabasis, Book I.:—

(A) Μετὰ τοῦτον ἄλλος ἀνέστη, ἐπιδεικνὺς μὲν τὴν εὐήθειαν τοῦ τὰ πλοῖα αἰτεῖν κελεύοντος, ὥσπερ πάλιν τὸν στόλον Κύρου μὴ ποιουμένου, ἐπιδεικνὺς δὲ ὡς εὐηθες εἴη ἡγεμόνα αἰτεῖν παρὰ τούτου, ᾧ λυμαινόμεθα τὴν πρᾶξιν· εἰ δέ τι καὶ τῷ ἡγεμόνι πιστεύσομεν ᾧ ἂν Κῦρος διδῷ, τί κωλύει καὶ τὰ ἄκρα ἡμῖν κελεύειν Κῦρον προκαταλαμβάνειν; Ἐγὼ μὲν γὰρ ὀκνοίην ἂν εἰς τὰ πλοῖα ἐμβαίνειν ἃ ἡμῖν δοίη, μὴ ἡμᾶς αὐταῖς ταῖς τριήρεσι καταδύσῃ· φοβοίμην δ' ἂν τῷ ἡγεμόνι ᾧ δοίη ἑπεσθαι, μὴ ἡμᾶς ἀγάγῃ ὅθεν οὐκ οἷόν τε ἔσται ἐξελθεῖν· βουλοίμην δ' ἂν ἀκοντος ἀπιὼν Κύρου λαθεῖν αὐτὸν ἀπελθών, ὃ οὐ δυτατόν ἐστιν. Ἀλλ' ἔγωγε φημὶ ταῦτα μὲν φλυαρίας εἶναι· δοκεῖ δέ μοι ἄνδρας ἐλθόντας πρὸς Κῦρον, οἵτινες ἐπιτήδειοι, σὺν Κλεάρχῳ ἐρωτᾶν ἐκεῖνον, τί βούλεται ἡμῖν χρῆσθαι· καὶ ἐὰν μὲν ἡ πρᾶξις ᾖ παραπλησία οἵαπερ καὶ πρόσθεν ἐχρῆτο τοῖς ξένοις, ἕπεσθαι καὶ ἡμᾶς καὶ μὴ κακίους εἶναι τῶν πρόσθεν τούτῳ συναναβάντων.

(B) Καὶ ἤδη τε ἦν μέσον ἡμέρας καὶ εὖπω καταφαιεῖς ἦσαν οἱ πολέμιοι· ἡνίκα δὲ δεῖλη ἐγίγνετο, ἐφάνη κονιορτὸς ὥσπερ νεφέλη λευκή, χρόνῳ δὲ οὐ συχνῷ ὕστερον ὥσπερ μελανία τις ἐν τῷ πεδίῳ ἐπὶ πολύ. ὅτε δὲ ἐγγύτερον ἐγίγνοντο, τάχα δὴ καὶ χαλκός τις ἠστραπτε καὶ αἱ λόγχαι καὶ αἱ τάξεις καταφαιεῖς ἐγίγνοντο. Καὶ ἦσαν ἱππεῖς μὲν λευκοθώρακες ἐπὶ τοῦ εὐωνύμου τῶν πολεμίων· Τισσαφέρνης ἐλέγετο τούτων ἄρχειν· ἐχόμενοι δὲ τούτων γεραφόροι, ἐχόμενοι δὲ ὁπλῖται σὺν ποδήρεσι ξυλίναις ἀσπίσιν, Αἰγύπτιοι δ' οὗτοι ἐλέγοντο εἶναι· ἄλλοι δ' ἱππεῖς, ἄλλοι τοξόται. πάντες δ' οὗτοι κατὰ ἔθνη ἐν πλαισίῳ πλήρει ἀνθρώπων ἕκαστον τὸ ἔθνος ἐπορεύετο. Πρὸ δὲ αὐτῶν ἅρματα διαλείποντα συχνὸν ἀπ' ἀλλήλων, τὰ δὴ δρεπανηφόρα καλούμενα· εἶχον δὲ τὰ δρέπανα ἐκ τῶν ἀξόνων εἰς πλάγιον ἀποτεταμένα καὶ ὑπὸ τοῖς δίφροις εἰς γῆν βλέποντα, ὡς διακόπτειν ὅτῳ ἐντυχάνοιεν. ἡ δὲ γνώμη ἦν ὡς εἰς τὰς τάξεις τῶν Ἑλλήνων ἐλῶντα καὶ διακόψοντα.

2. Give a short account of the expedition of Cyrus, with dates, and state what were its general results. Whence the term *ἀναβάσις*, and why applied to this undertaking?

3. Explain carefully the use of the *oblique cases* in the following extt.:—(*a*) *εἰ τῷ ἡγεμόνι πιστεύσομεν ᾧ ἂν διδῷ.* (*b*) *ἀκοντος ἀπιὼν*

Κύρου. (*c*) *ἔλαβον τῆς ζώνης τὸν Ὀ. ἐπὶ θανάτῳ*. (*d*) *ἑλὼντα καὶ διακόψοντα*:—What case, and why? (*e*) *πέμψαι προκαταληψομένους τὰ ἄκρα*:—the import of the *tense* of the Participle. (*f*) *οἵπερ πρόσθεν προσεκύνουν, καὶ τότε προσεκύνησαν*:—the distinction of *tense*, and why?

4. State the exact meaning of the prepositions in the following phrases:—*παρὰ δὲ Ξενίου ἐστρατοπεδεύσαντο παρὰ Κλεάρχῳ. παρὰ Βασιλέα πορεύεσθαι. παρὰ Κῦρον ἔστησαν. ἐπὶ τοῦ Κύρου ταῦτα ἐγένετο. ἐπὶ τὸν ποταμὸν ἐξελαύνει. ἐκ βασιλέως δεδόμεναι.*

5. (*a*) Explain the forms *πλείους* and *μείζους*. (*b*) How is the use of the Acc. Plu. in the expression *περὶ μέσας νύκτας* to be explained? (*c*) How do you account for the Genitive in the expression *ἴέναι τοῦ πρόσω*?

6. Translate, Homer, Iliad, Book I.:—

(C)

Ὣς ἔφατ' εὐχόμενος, τοῦ δ' ἔκλυε Φοῖβος Ἀπόλλων,
βῆ δὲ κατ' Οὐλύμποιο καρήνων χωόμενος κῆρ,
τόξ' ὤμοισιν ἔχων ἀμφηρεφέα τε φαρέτρην.
ἔκλαγξαν δ' ἄρ' ὀϊστοὶ ἐπ' ὤμων χωομένοιο
αὐτοῦ κινηθέντος· ὁ δ' ἤϊε νυκτὶ ἐοικώς.
ἕζετ' ἔπειτ' ἀπάνευθε νεῶν, μετὰ δ' ἰὸν ἧκεν·
δεινὴ δὲ κλαγγὴ γένετ' ἀργυρέοιο βιοῖο,
οὐρῆας μὲν πρῶτον ἐπῴχετο καὶ κύνας ἀργούς,
αὐτὰρ ἔπειτ' αὐτοῖσι βέλος ἐχεπευκὲς ἐφιεὶς
βάλλ'· αἰεὶ δὲ πυραὶ νεκύων καίοντο θαμειαί.

(D)

Αὐτὰρ ἐπεὶ παύσαντο πόνου τετύκοντό τε δαῖτα,
δαίνυντ', οὐδέ τι θυμὸς ἐδεύετο δαιτὸς ἐΐσης.
αὐτὰρ ἐπεὶ πόσιος καὶ ἐδητύος ἐξ ἔρον ἕντο,
κοῦροι μὲν κρητῆρας ἐπεστέψαντο ποτοῖο,
νώμησαν δ' ἄρα πᾶσιν ἐπαρξάμενοι δεπάεσσιν,
οἱ δὲ πανημέριοι μολπῇ θεὸν ἱλάσκοντο,
καλὸν ἀείδοντες παιήονα, κοῦροι Ἀχαιῶν,
μέλποντες ἑκάεργον· ὁ δὲ φρένα τέρπετ' ἀκούων.
αὐτὰρ ἐπεί ῥ' εἴξαντο καὶ οὐλοχύτας προβάλοντο,
αὐέρυσαν μὲν πρῶτα καὶ ἔσφαξαν καὶ ἔδειραν,
μηρούς τ' ἐξέταμον κατά τε κνίσῃ ἐκάλυψαν
δίπτυχα ποιήσαντες, ἐπ' αὐτῶν δ' ὠμοθέτησαν.
καῖε δ' ἐπὶ σχίζης ὁ γέρων, ἐπὶ δ' αἴθοπα οἶνον
λείβε· νέοι δὲ παρ' αὐτὸν ἔχον πεμπώβολα χερσίν.
αὐτὰρ ἐπεὶ κατὰ μῆρ' ἐκάη καὶ σπλάγχν' ἐπάσαντο,
μίστυλλόν τ' ἄρα τἆλλα καὶ ἀμφ' ὀβελοῖσιν ἔπειραν,
ὤπτησάν τε περιφραδέως, ἐρύσαντό τε πάντα.

7. (*a*) Name the dialects used by Xenophon and Homer respectively, and in ext. (D) point out the instances in which the Homeric form of the word differs from that used in common Attic prose. (*b*) How do you explain such forms as the following:—*νόσφιν, χαμαί, χαμᾶζε, οἰκοθεν*? (*c*) How is the Article used in Homer?

8. (*a*) Give the *power* and the *form* of the letter called *Digamma* (*b*) Point out any words in the foregoing extracts that were originally digammatized. (*c*) Write down the name and scheme of the metre of the Iliad, and scan vss. 13 and 14 of (D), pointing out where in vs 13 the Digamma was inserted and give the corresponding forms in Latin and English.

9. Parse the following verbs, giving the Pres. Inf. of each:—*ἐνῆκας, σόῳς, στορέσαι, δάμη, ὑπέστη, ὄνησαν, ποιεύμην, κάλλιπον, στάν, ἡρπασμένα, πείσομαι, ἠρώτων, ἐπιστάθωσαν, ἀποδεδράκασιν.*

10. (*a*) Decline the following nouns and adjectives:—*κάλλος, καλὸς, πολίτης, ὄρνις, ἐλέφας, μέγας.* (*b*) Write down the Comparative and Superlative of:—*σοφός, ἡδύς, κοῦφος, πολύς.* (*c*) Distinguish between *ἀπόφηναι, ἀποφῆναι* and *ἀποφήναι.* Give the *Genitive Singular* (in all genders) of the following pronouns:—*ἐγώ, αὐτός, οἵτος, τις,* and *ὅστις.* (*d*) Write down the principal parts of:—*τέμνω, πάσχω, πίπτω.*

FRENCH.

THURSDAY, MAY 27TH:—AFTERNOON, 2 TO 5.

Examiner.....P. J. DAREY, M.A., B.C.L.

1. Translate into English:

Maître Jacques. Vous dites?..... (1)

Harpagon. Qu'il faut nettoyer (2) mon carrosse, et tenir mes chevaux (3) tout (4) prêts pour conduire à la foire.....

Maître Jacques. Vos (5) chevaux, monsieur! Ils ne sont point du tout en état de marcher (6). Je ne vous dirai point qu'ils sont sur la litière, les pauvres bêtes n'en ont point; et ce serait mal parler: de plus vous leur (7) faites (8) observer des jeûnes (9) si austères, que ce ne sont (10) plus rien que des idées ou des fantômes de chevaux.

Harpagon. Les voilà bien malades! ils ne font rien.

Maître Jacques. Et pour ne faire rien, monsieur, est-ce qu'il ne faut rien manger? Il leur vaudrait bien mieux, les pauvres animaux, de travailler beaucoup, et de manger de même. Cela me fend le cœur, de les voir ainsi exténués; car enfin j ai une tendresse pour mes chevaux, qu'il me semble que c'est moi-même quand je les vois pâtir; je m'ôte tous les jours pour eux les choses de la bouche: et c'est être, monsieur, d'un naturel trop dur que de n'avoir nulle pitié de son prochain. MOLIERE, l'avare.

(1, 8 10.) To what tenses do those verbs belong? Write them in full. and also the Future, and Present of the subjunctive.

(2.) Express *qu'il faut nettoyer* with a personal tense of nettoyer.

(3.) What is the singular of that word? State the rule to form that plural. Give three exceptions.

(4.) To what part of the speech does *tout* belong? Why? To what other parts does it oftener belong? Give two examples?

(5.) Parse *vos*. What is its corresponding pronoun?

(6.) What difference is there between *marcher* and se *promener?*

(7.) When does *leur* take an *s?* Give an example.

(9.) What is the meaning of that word without an accent? Why has it that accent?

II. When do you translate *There is* by *voici*, and when by *il y a?* Give an example of each.

III. Translate and correct the following sentences.

Sa femme et moi qui est son fils, nous avons perdu tout espoir de le revoir. Sachez, jeune étranger qu'on n'abordent pas impunément dans mon île.

State the rules which ought to have been observed to write them correctly.

IV. Explain fully when the Preterit Definite, the Present of the Subjunctive mood and the Imperfect are to be used.
Give examples with the verb *connaître*.

V. Translate into French: They have seen and spoken to each other. Explain how the English construction differ from the corresponding one in French one. Also how you write the participle *seen* and *spoken*.

VI. Translate the following expressions: *To leave it to, to abide by, to be at stake, by stealth, to come to the point,* and *accuser réception d'une lettre, mettre a l'abri, battre froid a quelqu'un, faire a'une pierre deux coups, il tondrait sur un œuf.*

VI. Translate into French:

A FEW WORDS OF ADVICE TO YOUNG PEOPLE.

The great source of independence, the French express in a precept of three words, "*Vivre de peu*," which I have always admired. "*To live upon little*," is the great security against slavery; and this precept extends to dress and other things besides food and drink. When Doctor Johnson wrote his Dictionary, he put in the word pensioner thus: "Pensioner. *A slave of State.*" After this, he himself became a *pensioner!* And thus agreeably to his own definition, he lived and died "*a slave of State!* What must this man of great genius and of great industry too, have felt at receiving this pension! And, what could induce him to submit to this? His wants, his artificial wants, his habit of indulging in the pleasures of the table; his disregard of the precept, "*Vivre de peu.*"

WILLIAM COBETT.

ALGEBRA.

MONDAY, MAY 31ST :—MORNING, 9 TO 12.

Examiners ..... { REV. J. A. LOBLEY, M.A.
REV. A. N. MCQUARRIE, M.A.

1. Write down the quotients of $\frac{1}{8}a^3 + b^3$ by $\frac{1}{2}a + b$,
and $(x+y)^3 + z^3$ by $x + y + z$

2. Resolve into elementary factors $a^4 - b^4 + (a^2 - b^2)^2 - 2a^4 + 2a^2b^2$
$12x^2 - x - 1$
and $a^2x^2 - 3a^3x + 2a^4$

3. Expand by the Binomial Theorem $(a^3 - 2a^2b + 2ab^2 - b^3)^2$
and $(a-x)^8$

4. Extract the square root of $x^4 - 8x^3y + 24x^2y^2 - 32xy^3 + 16y^4$ and explain the process.

5. Extract the cube root of $a^6 - 3a^5b + 6a^4b^2 - 7a^3b^3 + 6a^2b^4 - 3ab^5 + b^6$
and explain the process.

6. Find the greatest common measure of
$6x^2y + 4xy^2 - 2y^3$ and $8x^3 + 4x^2y - 4xy^2$
and give the rule.

7. Simplify $\left(1 + \frac{1}{x}\right) \div \left(x - \frac{1}{x}\right) \times \left(1 - \frac{1}{x}\right)^2$

and $\dfrac{\dfrac{1}{1+x} + \dfrac{x}{1-x}}{\dfrac{1}{1-x} - \dfrac{x}{1+x}}$

8. Solve the equations $\dfrac{x}{a+x} = \dfrac{a+x}{x} - \dfrac{2a-b}{2x}$

and $\left\{ \begin{array}{l} \dfrac{x}{a} - \dfrac{y}{b} = m \\ \dfrac{x}{c} + \dfrac{y}{d} = n \end{array} \right\}$

9. A cistern can be filled in 15′ by two pipes, A and B, running together: after A has been running by itself for 5′ B is also turned on, and the cistern is filled in 13′ more: in what time would it be filled by each pipe separately.

10. A rectangular bowling-green having been measured, it was observed that if it were 5 feet broader and 4 feet longer, it would contain 116 feet more; but if it were 4 feet broader and 5 feet longer, it would contain 113 feet more. Find its present area.

EUCLID.

MONDAY, MAY 31ST:—AFTERNOON, 2 TO 5.

Examiners,..... { REV. J. A. LOBLEY, M.A.
REV. A. N. MCQUARRIE, M.A.

1. If one side of a triangle be produced, the external angle is greater than either of the internal and opposite angles.

2. A right line meeting two parallel right lines, makes the alternate angles equal to each other, and the external equal to the internal and opposite on the same side, and the two internal on the same side together equal to two right angles.

3. Equal triangles on the same base and on the same side are between the same parallels.

a. The right lines joining the points of bisection of the sides of a triangle are parallel to the sides and divide the triangle into four equal parts.

4. To a given right line to apply a parallelogram equal to a given triangle and with a given rectilinear angle.

5. If a right line be divided into any two parts, the square on the whole and the square on one of the parts, taken together, are equal to twice the rectangle contained by the whole, and that part and the square on the remaining part.

a. Give also the algebraical proof.

6. To divide a given right line so that the rectangle contained by the whole and one part shall be equal to the square on the other part.

7. In an obtuse-angled triangle, if a perpendicular be drawn from one of the acute angles to the opposite side produced, the square on the side subtending the obtuse angle shall be greater than the squares on the sides containing that angle by twice the rectangle contained by the side upon which, when produced, the perpendicular falls, and the intercept without the triangle, between the perpendicular and the obtuse angle.

8. In a circle, the angle in the semi-circle is right; that which is in a greater segment is less than a right angle; and that which is in a less segment is greater than a right angle.

9. If a right line touch a circle, and from the pont of contact another right line be drawn cutting the circle, the angles which it makes with the touching line shall be equal to the angles in the alterntae segments of the circle.

10. If two circles cut each other, prove that if any point be taken at the production of their common chord, and tangents be drawn from it to each of the circles, those tangents shall be equal.

BRITISH AND UNIVERSAL HISTORY.

TUESDAY, JUNE 1ST:—MORNING, 9 TO 10½.

Examiners..... { VEN. ARCHDEACON LEACH, D.C.L.
REV. PROF. MURRAY, LL.D.
F. W. KELLEY, A.M., PH.D.

1. What principle was involved in the quarrel between Henry II. and Thomas à Becket?

2. What were the leading provisions of Magna Charta?

3. Give the principal events in the reign of *one* of the Queens of England.

4. Trace the lineal descent of Queen Victoria from Mary, Queen of Scots.

5. Give a brief account of the city of Babylon.

6. Characterize the Spartans.

7. What were the causes and results of the Punic Wars? Name the chief commanders and the most important battles during those wars.

8. Tell briefly what you know of any *two* of the following persons:—Themistocles, Augustus Cæsar, Mohammed, Charlemagne, Charles XII., Martin Luther.

9. What important events occurred in the following years:—(B.C.) 480, 333; (A.D.) 70, 476, 800, 1453, 1529, 1588, 1759, 1776?

GEOGRAPHY.

TUESDAY JUNE, 1ST:—MORNING, 10½ TO 12.

Examiners..... { VEN. ARCHDEACON LEACH, D.C.L.
REV. PROF. MURRAY, LL.D.
F. W. KELLEY A.M., PH D.

1. Write down in order of importance ten of the foreign possessions of Great Britain.

2. Which are the agricultural, the manufacturing, and the mining districts of Great Britain? Name the principal city in each.

3. Describe as minutely as possible the boundary line between Canada and the United States.

4. Draw an outline map of the United States, marking the principal coast and inland waters. What States are noted for the production of coal? Of iron? Of gold? Of cotton? Of wheat? Of tobacco?

5. Compare the River systems of North and South America.

6. Name the peninsular countries of Europe; and describe the configuration, natural productions, and leading industries of any one of them.

7. What large Cities are about in the same latitude as New York? In the same longitude?

8. Central Labrador, Edinburgh and Moscow are nearly in the same latitude. State how they differ in respect to climate, and give the main causes of difference.

9 What are the principal land animals peculiar to each continent?

10. "The continents have in general elevated mountain borders. The highest border faces the larger ocean." Prove or disprove these statements as regards Asia and the Americas.

ENGLISH LANGUAGE, LITERATURE AND COMPOSITION.

TUESDAY, JUNE 1ST :—AFTERNOON, 2 TO 5.

Examiners..... { VEN. ARCHDEACON LEACH, D.C.L.
REV. PROF. MURRAY, L.L.D.
F. W. KELLEY, A.M., Ph.D.

1. Show by the aid of a diagram the relation of the English language to the other branches of the Indo-European family of languages.

2. The bulk of our borrowed words are of Latin origin; when and how did they come into the language?

3. Write down the words in the Lord's Prayer not of Saxon origin.

4. State clearly the differences between Early English, (Anglo-Saxon) and Modern English.

5. Sketch briefly the plan of the Canterbury Tales. What eminent literary men were living in England at the time of Chaucer?

6. Give a brief outline of the rise and progress of the English Drama previous to Shakspere.

7. Tell the chief facts in the life of Shakspere. Name ten of his dramas.

8. When and by whom were the following books written?—Robinson Crusoe, Gulliver's Travels, the Pickwick Papers, the Faerie Queen, In Memoriam?

9. Describe Milton's Satan, or, Trace the adventures of Pilgrim between the Palace Beautiful and the Celestial city.

10. Write a short account of one of your favorite books.

SUBJECTS FOR COMPOSITION. { THE FALL OF QUEBEC.
JULIUS CÆSAR.
AN EVENTFUL DAY.

MENSURATION.

WEDNESDAY, JUNE 2ND:—AFTERNOON, 2 TO 5.

Examiners..... { REV. J. A. LOBLEY, M.A.
REV. A. N. MCQUARRIE, M.A.

1. Find the area of a rectangular board 16 feet 2 inches long and 2 feet 5 inches broad.

2. There is a garden in the form of a square whose side is 60 yards. Find how much ground will be taken up by two paths, each 3 yards wide, crossing it diagonally.

3. Give a rule for finding the area of a triangle when the lengths of the three sides are given.

a. Find the area of the triangle whose sides are 28 feet, 25 feet, and 17 feet respectively.

4. Find the area of a circular sector whose radius is 7·2 inches and arc 5·45 inches. Give a reason for the process.

5. Find the area of a square inscribed in a circle whose area is 400 square feet.

6. Show how to find the superficial content of a parabolic area whose base and height are given.

a. Find the area of a zone of a parabola bounded by two double ordinates whose lengths are 16 feet and 22 feet, and distances from the vertex 8 feet and 15⅛ feet respectively.

7. Show how to find approximately the area of a space bounded on one side by the transverse axis and on the other by the curve of an hyperbola, by means of equi-distant ordinates.

8. Show how to find the solid content of the frustum of a pyramid.

a. A pyramid 21 inches high has for its base a right-angled isosceles triangle each side of which is 6 inches long. If it be divided by a plane parallel to the base 12 inches from the apex, find the content of each portion.

9. Find how much paper will be required to cover outside and inside a hollow hemisphere, whose internal diameter is 10 inches and external 12 inches.

NATURAL PHILOSOPHY.

WEDNESDAY, JUNE 2ND:—AFTERNOON, 2 TO 5.

Examiners,..... { REV. J. A. LOBLEY, M.A.
REV. A. N. MCQUARRIE, M.A.

1. Define force, and shew how the intensity and direction of a force can be represented on paper.

2. A uniform bar of iron 15 feet long is supported by two men, one of whom is placed at one end; find where the other must be placed that he may sustain ⅗ of the whole weight.

3. If three forces be represented in intensity and direction by the sides of a triangle act on one point; prove that they may so act as to be in equilibrium.

4. Find what weight can be supported by means of a single movable pulley weighing 1 lb., by a force of 11 lbs.

5. Find the centre of gravity of three equal uniform rods joined together at their extremities so as to form a triangle.

6. If a particle move from rest under the action of a uniform accelerating force f, show that the space described in time $t = \frac{1}{2} f t$.

a. Two particles are let fall from the same point at an interval of 2″; find how far apart they will be when the second has been falling 1″, the accelerating force of gravity being 32·2 feet per second.

7. Shew that the surface of a fluid at rest is a horizontal plane.

8. A cylindrical pipe 10 inches in diameter opens into another 15 inches in diameter. If they be filled with water, and a force of 5 lbs. be applied at the open end of the first pipe, what force must be applied at the open end of the second to keep the water at rest.

9. A body float in a fluid with $\frac{2}{3}$ of its volume immersed. Compare the specific gravities of the body and the fluid.

10. Explain the use of the Diving Bell.

If a Diving Bell be let down in the water by a chain and no fresh air be forced in, shew that the tension of the chain will increase as the bell descends.

CHEMISTRY.

WEDNESDAY, JUNE 2ND :—MORNING, 9 TO 12.

Examiners..... { PRINCIPAL DAWSON. DR. HARRINGTON.

1. What do you understand by the term *specific gravity?* A fragment of a mineral weighs 2.5 grams in air and 2 grams in water. What is its specific gravity?

2. Explain the difference between the Fahrenheit and centigrade thermometric scales.

3. Describe the spectroscope, and explain its use in chemical analysis.

4. How is coal-gas manufactured, and what are its principal constituents?

5. What are the properties of the gas which is given off when sodic chloride, manganic dioxide and sulphuric acid are heated together? If the manganic dioxide were not added, what gas would be obtained?

6. Describe the manufacture of sulphuric acid.

7. What is the composition of the following substances?—Glaubers' salt, Epsom salts, Blue Vitriol, Corrosive Sublimate and Calomel.

8. By what tests may Lead and Arsenic be detected when in solution?

9. What are the principal ores of Iron, and how is the metal obtained from them?

10. Give the chemical symbols for Gold, Silver, Copper and Mercury, and the atomic weights of Chlorine, Carbon and Calcium.

BOTANY.

WEDNESDAY, JUNE 2ND:—AFTERNOON, 2 TO 5.

Examiner.....PRINCIPAL DAWSON.

1. What are the parts of a maple seed, and how developed?

2. Explain the terms parenchyma, stomata, stipule, as applied to leaves.

3. Describe root-fibrils, and explain their uses.

4. Describe the structures in a typical flower.

5. Explain the structures of a drupe, achene, legume.

6. Describe the structures in an exogenous stem.

7. Explain the sources of the food of plants.

8. What chemical changes are taking place in the leaf of a growing plant?

9. Name the series and classes of plants, and illustrate the manner of arranging plants in orders, genera and species.

10. Describe the parts of the flower exhibited.

W. Greenshields &
McGill Co
Montreal
Que

2° Year Arts

Jan. 18th 1881

LE
3
M2
1975/76

McGill Universtiy, Montreal
Calendar

72

PLEASE DO NOT REMOVE
CARDS OR SLIPS FROM THIS POCKET

UNIVERSITY OF TORONTO LIBRARY